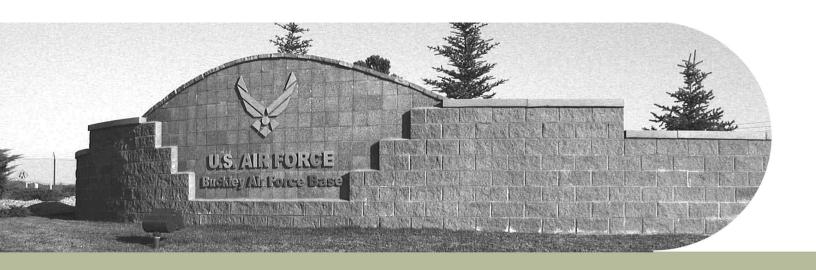
Environmental Assessment for the Proposed Construction of a H-70 Fuel Storage Facility and a Medical Pharmacy





Prepared for:
460 CES/CEVP
Buckley Air Force Base
660 South Aspen Street, Stop 86
Building 1005, Room 254
Buckley Air Force Base, Colorado 80011-9551

Prepared by:
Air Force Center for Environmental Excellence
3300 Sidney Brooks Road
Brooks City-Base, Texas 78235-5112

Report Documentation Page

Form Approved OMB No. 0704-018

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE MAY 2003	2. REPORT TYPE	3. DATES COVERED 00-00-2003 to 00-00-2003
4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER	
Environmental Assessment for the P	5b. GRANT NUMBER	
Storage Facility and a Medical Pharm	5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)	5d. PROJECT NUMBER	
	5e. TASK NUMBER	
	5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND Air Force Center for Environmental Road, Brooks City-Base, TX,78235	8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT

Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

This EA evaluates the potential environmental consequences of constructing and operating an H-70 fuel storage facility and a medical pharmacy at BAFB, to (1) to provide storage and limited repair space for H-70 fuel canisters in a location near airfield operations and sufficiently outside of noncompatible land uses and (2) to provide an on-installation, centrally located alternative for medical pharmaceutical needs to military personnel, their dependents, and military retirees in the Denver metropolitan area. These two actions are being proposed simultaneously in this EA to better identify and address potential cumulative impacts from these proposed construction activities and additional future activities on BAFB. The proposed action and alternatives addressed in this EA include (1) construction/operation of an H-70 fuel storage facility at the west end of the main ramp, demolition of the existing H-70 fuel storage facility Building 310, and the construction/operation of a medical pharmacy adjacent the to BAFB commissary/exchange (Proposed Action); (2) construction/operation of an H-70 fuel storage facility at the west end of the main ramp, demolition of the existing H-70 fuel storage facility Building 310, and the construction/operation of a medical pharmacy adjacent to Building 600 (Alternative 1); and (3) the no action alternative. This EA has been prepared in accordance with the National Environmental Policy Act to analyze the potential environmental consequences of constructing an H-70 fuel storage facility and a medical pharmacy. Under the no action alternative, the H-70 fuel storage facility and the medical pharmacy would not be constructed and activities would remain at current locations. The environmental resources potentially affected by the proposed action and alternatives include hydrologic resources; air quality; noise; biological resources, including vegetation, wildlife, and protected species; social and economic resources, including environmental justice; land use; and hazardous materials. Based on the nature of the activities that would occur during construction/operation of the H-70 fuel storage facility and the medical pharmacy, the U.S. Air Force has determined that minimal or no adverse impacts to the above resources are anticipated.

15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	284	REST CHOISEE I ERCO.

Standard Form 298 (Rev. 8-98) Prescribed by ANSI Std Z39-18

FINDING OF NO SIGNIFICANT IMPACT CONSTRUCTION/OPERATION OF AN H-70 FUEL STORAGE FACILITY AND A MEDICAL PHARMACY AT BUCKLEY AIR FORCE BASE, COLORADO

Agency

U.S. Air Force, 460th Air Base Wing

Background

The attached environmental assessment (EA), dated February 2003, analyzes the potential for impacts to the environment as a result of construction/operation of an H-70 fuel storage facility, the demolition of the existing H-70 storage facility located at Building 310, and the construction/operation of a medical pharmacy at Buckley Air Force Base (BAFB), Colorado. This EA was prepared in accordance to 32 Code of Federal Regulations (CFR) §989, which, in turn, implements Section 102 (2) of the National Environmental Policy Act (NEPA) and the regulations established by the Council on Environmental Quality (CEQ).

Proposed Action

The proposed action and alternatives included (1) construction/operation of an H-70 fuel storage facility at the west end of the main ramp, demolition of the existing H-70 fuel storage facility, Building 310, and the construction/operation of a medical pharmacy adjacent to the BAFB commissary/exchange (Proposed Action); (2) construction/operation of an H-70 fuel storage facility at the west end of the main ramp, demolition of the existing H-70 fuel storage facility, Building 310, and the construction/operation of a medical pharmacy adjacent to Building 600 (Alternative 1); and (3) the no action alternative.

Factors Considered in Determining That No Environmental Impact Statement is Required

The EA analyzed the environmental impacts of implementing the Proposed Action, Alternative 1, and the No Action Alternative taking into account all relevant environmental resource areas and conditions. The U.S. Air Force has examined the following resource areas and found that implementing the Proposed Action or Alternative 1 would not result in any significant impacts: hydrologic resources; air quality; noise; biological resources; social or economic resources; land use, transportation, and public services and infrastructure: and hazardous materials

Public Notice

NEPA, 40 CFR §1500-1508, and 32 CFR §989 require public review of the EA before approval of the finding of no significant impact (FONSI) and implementation of the Proposed Action. The public review period ended on 18 March 2003.

Finding of No Significant Impact

Based on the requirements of NEPA, 40 CFR §1500-1508, and 32 CFR §989, I conclude that the environmental effects of implementing the Proposed Action are not significant, and therefore, an environmental impact statement will not be prepared. A notice of availability for public review was published in the Denver Post on 01 March 2003 indicating a 15-day review period. A hard copy of the Draft EA and Draft FONSI was placed in the Denver and Aurora public libraries for dissemination. The signing of this FONSI completes the USAF Environmental Impact Analysis Process.

MES A. SANDS

A. SANDS

ommander, 460th Air Base Wing

Date

4-11-03

COVER SHEET ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED CONSTRUCTION OF AN H-70 FUEL STORAGE FACILITY AND A MEDICAL PHARMACY AT BUCKLEY AIR FORCE BASE, COLORADO

Prepared by
Headquarters Air Force Center for Environmental Excellence
Brooks Air Force Base, Texas 78235-5122

- a. **Responsible Agency**: U.S. Air Force, 460th Air Base Wing
- b. **Proposed Action**: Construct and operate an H-70 fuel storage facility at the west end of the main ramp, demolish the existing H-70 fuel storage facility located at Building 310, and construct a medical pharmacy adjacent to the base commissary/exchange at Buckley Air Force Base (BAFB), Colorado.
- c. Written comments and inquiries regarding this document should be directed to: Elise Sherva, 460 CES/CEVP, 660 S. Aspen Street (Mail Stop 86), Bldg. 1005, Room 254, Buckley AFB, Colorado 80011-9551; telephone (303) 677-9077; e-mail elise.sherva@buckley.af.mil.
- d. **Designation**: Environmental Assessment (EA)
- e. Abstract: This EA evaluates the potential environmental consequences of constructing and operating an H-70 fuel storage facility and a medical pharmacy at BAFB, to (1) to provide storage and limited repair space for H-70 fuel canisters in a location near airfield operations and sufficiently outside of noncompatible land uses and (2) to provide an on-installation, centrally located alternative for medical pharmaceutical needs to military personnel, their dependents, and military retirees in the Denver metropolitan area. These two actions are being proposed simultaneously in this EA to better identify and address potential cumulative impacts from these proposed construction activities and additional future activities on BAFB. The proposed action and alternatives addressed in this EA include (1) construction/operation of an H-70 fuel storage facility at the west end of the main ramp, demolition of the existing H-70 fuel storage facility, Building 310, and the construction/operation of a medical pharmacy adjacent the to BAFB commissary/exchange (Proposed Action); (2) construction/operation of an H-70 fuel storage facility at the west end of the main ramp, demolition of the existing H-70 fuel storage facility, Building 310, and the construction/operation of a medical pharmacy adjacent to Building 600 (Alternative 1); and (3) the no action alternative.

This EA has been prepared in accordance with the National Environmental Policy Act to analyze the potential environmental consequences of constructing an H-70 fuel storage facility and a medical pharmacy. Under the no action alternative, the H-70 fuel storage facility and the medical pharmacy would not be constructed and activities would remain at current locations.

The environmental resources potentially affected by the proposed action and alternatives include hydrologic resources; air quality; noise; biological resources, including vegetation, wildlife, and protected species; social and economic resources, including environmental justice; land use; and hazardous materials. Based on the nature of the activities that would occur during construction/operation of the H-70 fuel storage facility and the medical pharmacy, the U.S. Air Force has determined that minimal or no adverse impacts to the above resources are anticipated.

f. Comments must be received by: 18 March 2003

TABLE OF CONTENTS

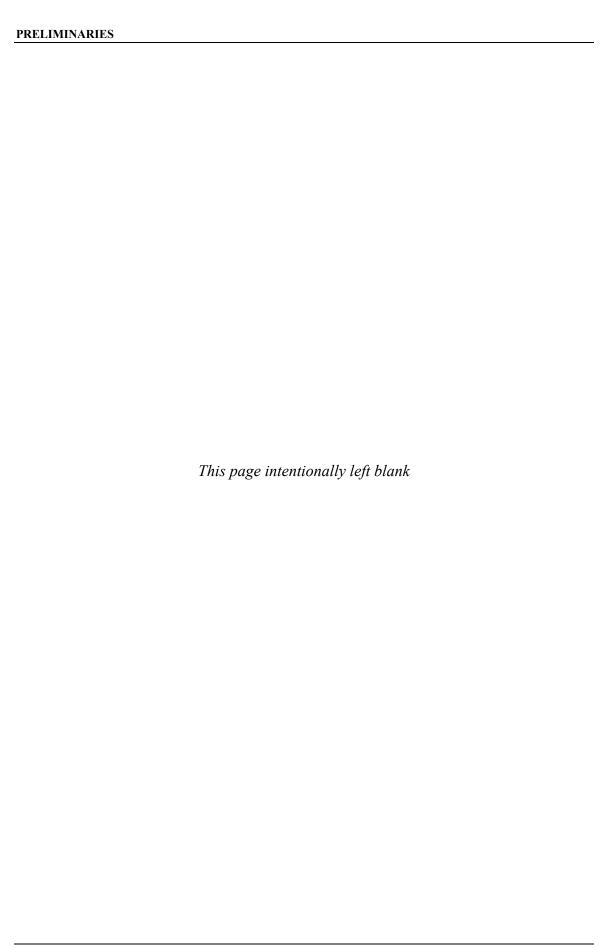
SECTI	ON 1.0 PURPOSE OF AND NEED FOR THE ACTION	1-1
1.1	INTRODUCTION AND BACKGROUND	1-1
1.2	PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE	
	ACTIONS AT BUCKLEY AIR FORCE BASE	1-3
1.3	PURPOSE AND NEED FOR THE PROPOSED ACTION	1-3
1.4	SCOPE OF THE ENVIRONMENTAL ASSESSMENT	1-6
1.5	ORGANIZATION OF THE ENVIRONMENTAL ASSESSMENT	1-7
SECTI	ON 2.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION	N 2-1
2.1	IDENTIFICATION OF SELECTION CRITERIA	2-1
2.2	DESCRIPTION OF THE PROPOSED ACTION	
	2.2.1 H-70 Fuel Storage Facility	
	2.2.2 Medical Pharmacy	2-6
2.3	ALTERNATIVES EVALUATION PROCESS	
	2.3.1 Alternatives Eliminated from Detailed Analysis	
	2.3.2 Alternatives Carried Forward for Detailed Analysis	
2.4	COMPARISON OF THE ALTERNATIVES CARRIED FORWARD	2-11
SECTI	ON 3.0 AFFECTED ENVIRONMENT	3-1
3.1	HYDROLOGIC RESOURCES	3-1
	3.1.1 Regulatory Requirements	3-1
	3.1.2 Existing Conditions	
3.2	AIR QUALITY	3-4
	3.2.1 Regulatory Requirements	3-4
	3.2.2 Existing Conditions	3-6
3.3	NOISE	3-7
	3.3.1 Regulatory Requirements	3-9
	3.3.2 Existing Conditions	
3.4	BIOLOGICAL RESOURCES	3-11
	3.4.1 Regulatory Requirements	
	3.4.2 Existing Conditions	3-11
3.5	SOCIAL OR ECONOMIC RESOURCES (INCLUDING	
	ENVIRONMENTAL JUSTICE)	3-12
	3.5.1 Regulatory Requirements	3-12
	3.5.2 Existing Conditions	
3.6	LAND USE AND TRANSPORTATION	
	3.6.1 Regulatory Requirements	
	3.6.2 Existing Conditions	3-18
3.7	PUBLIC SERVICES AND UTILITIES	
	3.7.1 Public Services – Existing Conditions	
	3.7.2 Utilities – Existing Conditions	
3.8	HAZARDOUS MATERIALS AND SUBSTANCES	
	3 8 1 Hazardous Materials and Hazardous Wastes	3-23

TABLE OF CONTENTS (cont'd)

	3.8.2	Asbestos	3-27
	3.8.3	Radon	3-27
3.9	RESO	URCES ELIMINATED FROM DETAILED ANALYSIS IN THIS	
	ENVII	RONMENTAL ASSESSMENT	3-29
	3.9.1	Soils	3-29
	3.9.2	Historic or Archeological Resources	3-30
SECTI	ON 4.0	ENVIRONMENTAL CONSEQUENCES	4-1
4.1	HYDR	OLOGIC RESOURCES	4-2
	4.1.1	No Action	4-2
	4.1.2	Proposed Action	4-2
	4.1.3	Alternative 1	
4.2	AIR Q	UALITY	4-3
	4.2.1	No Action.	4-3
	4.2.2	Proposed Action	
	4.2.3	Alternative 1	
4.3	NOISE	3	
	4.3.1	No Action.	
	4.3.2	Proposed Action	
	4.3.3	Alternative 1	
4.4	BIOLO	OGICAL RESOURCES	
	4.4.1	No Action	
	4.4.2	Proposed Action	4-10
	4.4.3	Alternative 1	
4.5		AL OR ECONOMIC RESOURCES (INCLUDING	
		RONMENTAL JUSTICE)	4-11
	4.5.1	· · · · · · · · · · · · · · · · · · ·	
	4.5.2	Proposed Action	
	4.5.3	Alternative 1	
4.6	LAND	USE AND TRANSPORTATION	
	4.6.1		
	4.6.2	Proposed Action	
		Alternative 1	
4.7		IC SERVICES AND UTILITIES	
	4.7.1	No Action	
	4.7.2		
	4.7.3	•	
4.8		RDOUS MATERIALS AND SUBSTANCES	
	4.8.1	No Action	
		Proposed Action	
	4.8.3	-	
4.9		JLATIVE IMPACTS	
1.7	4.9.1	Hydrologic Resources	
	4.9.2	Air Quality	
	4.9.3	Noise	
			_ J

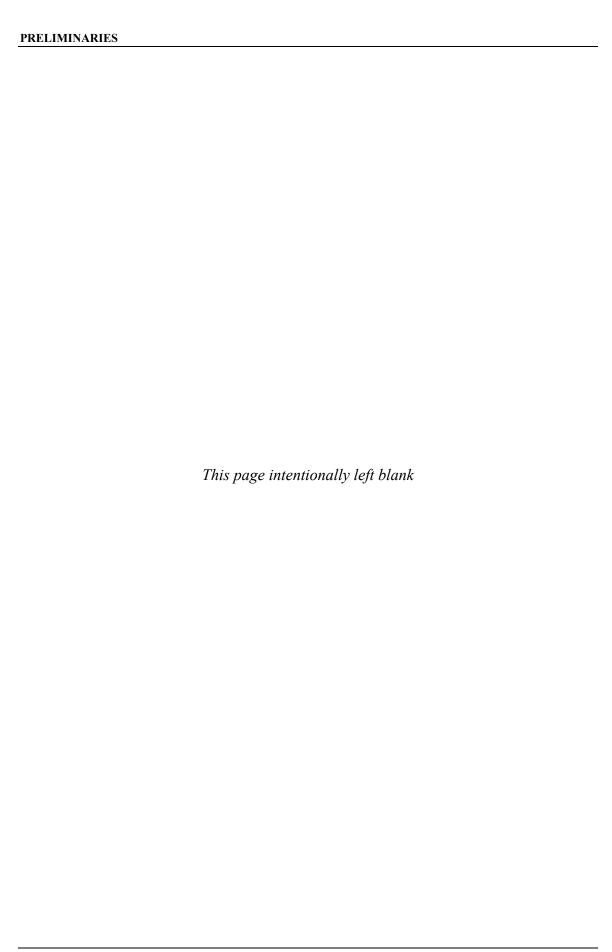
TABLE OF CONTENTS (cont'd)

4.9.4	Biological Resources	
4.9.5	Social or Economic Resources (Including Environmental Justice)	4-20
4.9.6	Land Use and Transportation	
4.9.7	Public Services and Infrastructure	4-21
4.9.8	Hazardous Materials and Substances	4-21
SECTION 5.0	LIST OF PREPARERS	5-1
SECTION 6.0	DISTRIBUTION LIST AND AGENCIES AND	
	INDIVIDUALS CONTACTED	6-1
SECTION 7.0	REFERENCES	7-1
SECTION 8.0	ACRONYMS AND ABBREVIATIONS	8-1
APPENDICES		
Appendix A:	USAF Form 813	
Appendix B:	Photograph Location Map and Photographs	
Appendix C:	BAFB Black-Tailed Prairie Dog/Burrowing Owl Constraints	on
	Construction Projects	
Appendix D:	EDR Radius Search	
Appendix E:	Notice of Availability Affidavit	
Appendix F:	Transmittal Letters	
Appendix G:	Agency Comment Letters and Responses	



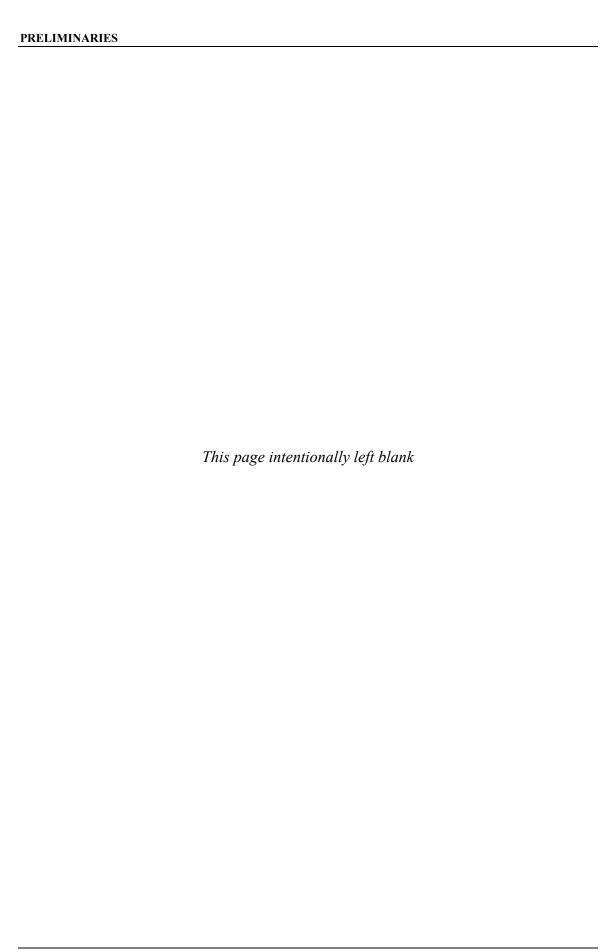
LIST OF FIGURES

No.		<u>Page</u>
1-1	General Location of BAFB	1-2
1-2	Location of Current H-70 Fuel Storage Facilities at Building 310 and	
	Medical Clinic at Building 600	1-5
2-1	Location of the Proposed Action and Alternatives	
2-2	H-70 Fuel Storage Facility Current and Proposed Locations	
3-1	Hydrologic Resources of BAFB	3-3
3-2	Noise Contours at BAFB	3-10
3-3	RTD Local Route 10	3-21
3-4	ERP Sites at BAFB	3-26
3-5	Location of World War II-Era Structures in Association with the Proposed	
	Action and Alternatives	3-28
4-1	Estimated Downwind PM ₁₀ Concentrations	4-5



LIST OF TABLES

No.		<u>Page</u>
1-1	Tenant Units at BAFB	1-3
1-2	Scheduled Facility Projects at BAFB	1-4
2-1	Summary Comparison of the Proposed Action and Alternatives Carried	
	Forward	2-12
3-1	National Ambient Air Quality Standards	3-5
3-2	Applicability Thresholds for Criteria Pollutants in Nonattainment Areas	3-7
3-3	Applicability Thresholds for Attainment/Maintenance Areas	3-7
3-4	Federal and State-Listed Species Potentially Occurring in Arapahoe County,	
	Colorado	3-13
3-5	BAFB Land Use Inventory	3-19
3-6	Land Use, Noise, and Accident Potential Compatibility Guidelines	
3-7	ERP Sites on BAFB	
4-1	Alternatives Comparison Matrix Summary	4-1
4-2	Applicability Thresholds for Criteria Pollutants for Denver Air Quality	
	Control Region (AQCR 36)	4-3
4-3	Construction PM ₁₀ Emissions for Stationary Sources	4-4
4-4	Total Construction Emissions Compared to Applicability Threshold	4-6
4-5	Total Construction Emissions Compared to AQCR 36 Total Emissions	4-6
4-6	Emissions from Anticipated Support Services	4-7
4-7	Organic HAP Emission Rate Calculations	4-7
4-8	Inorganic HAP Emission Rate Calculations	4-8
4-9	Estimated Average Annual Stormwater Flows for BAFB	4-17
4-10	Peak Stormwater Flows for BAFB during 10-, 25-, 50-, and 100-Year Storm	
	Events	4-18
4-11	PM ₁₀ Emissions for Previous, Proposed, and Reasonably Foreseeable	
	Construction Activities	4-19
4-12	Emissions for Previous, Proposed, and Reasonably Foreseeable Heating and	
	Cooling Activities	4-19
4-13	Estimated Increase in Utility Demand	4-21



SECTION 1.0 PURPOSE OF AND NEED FOR THE ACTION

This environmental assessment (EA) was prepared in accordance with 32 Code of Federal Regulations (CFR) §989, which, in turn, implements Section 102 (2) of the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321 to 4370d), as implemented by the regulations promulgated by the Council on Environmental Quality (CEQ) (40 CFR §1500-1508). The principal objectives of NEPA are to ensure the careful consideration of environmental aspects of proposed actions in federal decision-making processes and to make environmental information available to decision-makers and the public, before decisions are made and actions are taken. This EA has been prepared by the U.S. Air Force (USAF) to assess the environmental effects resulting from the proposed military construction of an H-70 fuel storage facility and the demolition of the existing H-70 fuel storage facilities located at Building 310 in Fiscal Year 2003 (FY 03) and the military construction of a medical pharmacy in FY 05 at Buckley Air Force Base (BAFB).

1.1 INTRODUCTION AND BACKGROUND

BAFB encompasses approximately 3,250 acres adjacent to the City of Aurora, Arapahoe County, Colorado, within the Denver metropolitan area (Figure 1-1). On 01 October 2000, Buckley Air National Guard Base (BANGB) was realigned into BAFB under the direction of the 821st Space Group. One year later, the 460th Air Base Wing (460 ABW) was activated as the host of BAFB when the 821st Space Group was inactivated. The 460 ABW is part of the 14th Air Force, based in Vandenberg, California (BAFB 2002a). The mission of the 460 ABW is to operate BAFB and provide superior support and services to the base operational mission, to the Front Range Area Defense community and their families, and to the military retiree community within the Denver metropolitan area (BAFB 2002b). The current population of BAFB includes 3,346 active duty personnel, 1,561 Colorado Air National Guard (COANG)/USAF reserves, 2,171 U.S. Army/Navy/Marine reserves, approximately 1,100 civilian employees, and approximately 1,400 contract employees. The tenant units at BAFB are listed in Table 1-1; however, this list is not inclusive since units tend to change over time.

During the initial scoping process, five military construction actions planned for FY 03 were to be considered within one EA. These actions included the 140th Wing COANG Headquarters, a car wash, a hazardous materials/hazardous wastes pharmacy, an H-70 fuel storage facility, and a medical pharmacy. However, due to changes in construction scheduling and scope of individual actions, this EA only addresses the military construction of an H-70 storage facility and a medical pharmacy. The 140th Wing COANG Headquarters proposed action has been rescheduled for FY 06, the car wash was developed into an additional EA, and the hazardous materials/hazardous wastes pharmacy was developed into an additional EA as a hazardous materials issue facility and a hazardous wastes storage facility.

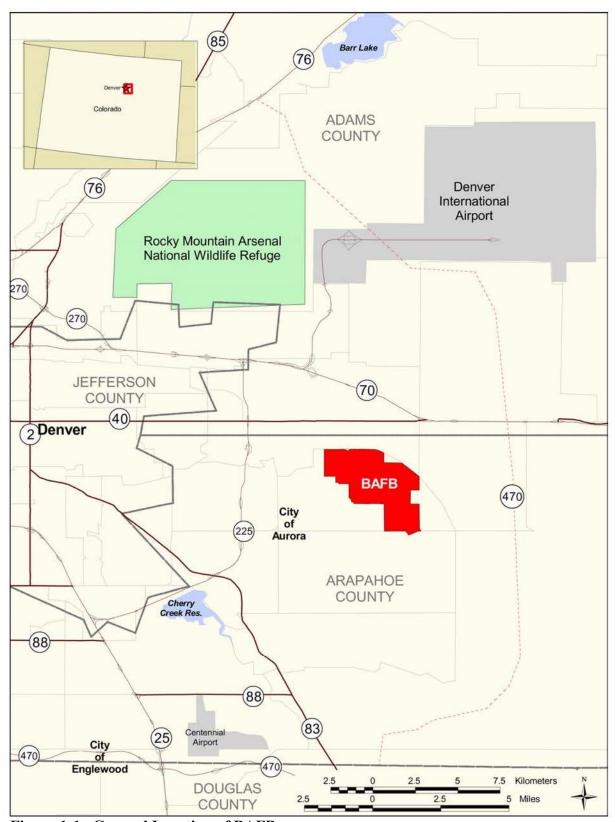


Figure 1-1. General Location of BAFB

Table 1-1 Tenant Units at BAFB

- 140th Wing, COANG
- 2nd Space Warning Squadron
- 8th Space Warning Squadron
- 566th Information Operations Squadron
- Detachment 4, Air Force Operational Testing and Evaluations Center
- Detachment 801, Air Force Office of Special Investigation
- Detachment 45, Air Force Technical Applications Center
- Aerospace Data Facility
- Navy/Marine Corps Reserve Center
- Marine Air Control Squadron
- Combined Task Force
- Air Force Auditing Agency

- COARNG
- Civil Air Patrol Defense Commissary Agency
- Army/Air Force Exchange Service
- Air Force Accounting and Finance Office
- Air Force Base Conversion Agency
- Air Force Institute of Technology
- Air Force Reserve Personnel Center

- Battery A, 1st Battalion, 14th Marines
- Defense Contract Manager
- Defense Finance and Accounting Service
- Military Entrance Processing Station
- Naval Reserve Recruiting Command
- U.S. Army Recruiting Battalion
- 55th Space Weather Squadron

COANG = Colorado Air National Guard COARNG = Colorado Army National Guard

Source: BAFB 2002b

1.2 PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS AT BUCKLEY AIR FORCE BASE

Within the BAFB General Plan, a list of facilities/areas proposed for construction between FY 02 to FY 13 totaling greater than one million square feet (SF), was developed (BAFB 2002b). Fifty-four activities/facilities have been identified as needed for successful operation of BAFB and to improve the quality of life for active, reserve, and retired members of the armed services living in the Denver metropolitan area. Within the past two years, construction has been completed on a new base exchange/commissary (185,000 SF) and a space-based infrared surveillance (SBIRS) antenna. Planned construction of approximately 883,000 SF, which includes occupiable SF and parking, is expected within the next four years (FY 02-FY 05); however, timelines are subject to change and projects may be constructed at an earlier or later date (Table 1-2). The H-70 fuel storage facility and the medical pharmacy would account for approximately 9,641 SF of the projected four-year total. Currently, BAFB has 156 buildings with approximately 2.2 million gross SF of occupiable floor space (BAFB) 2002b). Using an estimate of 90 percent of occupiable SF, BAFB would contain approximately 2.0 million SF of parking for a combined 4.2 million SF of developed surface.

1.3 PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose for the proposed action is (1) to provide storage and limited repair space for H-70 fuel containers, until the containers are transported off-base for reuse or repair, in a location near airfield operations and sufficiently outside of noncompatible land uses and (2) to provide an on-installation, centrally located alternative for medical pharmaceutical needs to military personnel, their dependents, and military retirees in the Denver

Table 1-2 Scheduled Facility Projects at BAFB

FY 02

- Physical Fitness Center¹
- 2nd Dormitory (144)
- Military Family Housing¹
- Telluride/6th Avenue Entry Gate

FY 03

- 460 ABW Headquarters
- ADAL SBIRS Mission Control
- Visitors' Quarters/Temporary Lodging Facility
- Car Wash (AAFES)
- Control Tower (COANG)
- Engine Shop Addition, Building 960 (COANG)
- Repair Runway, Taxiways, Ramps (COANG)
- Repair Fuel Cell/Corrosion Control, Building 800 (COANG)
- Entomology
- H-70 Fuel Storage Facility

FY 04

- Upgrade BAFB Infrastructure, Phase III
- Approach Lighting (COANG)
- Repair COANG Supply, Building 841 (COANG)
- Repair COANG Parking Lots (COANG)
- Maintain Maintenance Hangar 801 (COANG)
- ADAL Airfield Access Roads (COANG)

FY 05

- Repair Taxiways A & K
- ADAL Communications Center, Building 730
- Chapel Center
- Child Development Center
- Athletic Fields
- Outdoor Recreation Equipment Rental (NAF)
- ADAL Medical Clinic
- Medical Pharmacy
- Leadership Development Center
- Consolidated Fuels
- Military Gas Station
- Vehicle Maintenance Facility
- Widen 6th Avenue
- Hazardous Waste Storage Facility
- Hazardous Materials Issue Facility
- Army Aviation Support Facility (COARNG)
- Permanent Alert Shelters & Crew Quarters (COANG)

These projects were carried into FY 03.

AAFES = Army/Air Force Exchange Service

ADAL = Addition/Alteration

COANG = Colorado Air National Guard COARNG = Colorado Army National Guard

NAF = nonappropriated funds

Source: BAFB 2002b

metropolitan area (Appendix A). These two actions are being proposed simultaneously in this EA to better identify and address potential cumulative impacts from these proposed construction activities and additional future activities on BAFB and due to construction scheduling changes and scope of individual actions.

The H-70 fuel storage facility is considered an industrial function and would be most appropriately sited in an industrial land use area. Currently, the H-70 fuel storage facilities are located south of the intersection of Telluride Street and A-basin Avenue, near a noncompatible land use (i.e., planned family housing and other planned residential,

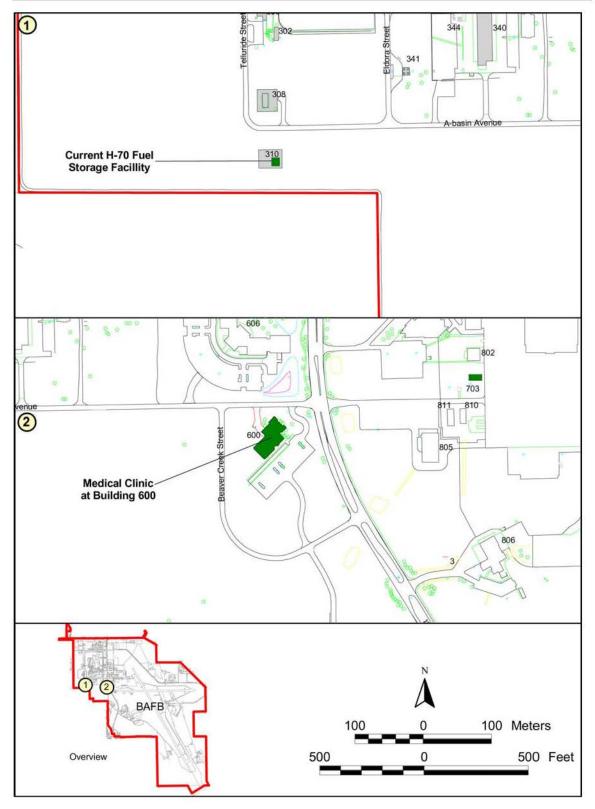


Figure 1-2. Location of Current H-70 Fuel Storage Facilities at Building 310 and Medical Clinic at Building 600

recreational, or retail areas) (Figure 1-2). The current H-70 storage facilities are an 820-SF building (Building 310), which is located in a non-COANG licensed portion of the installation and have an inadequate explosive arch buffer area. The proposed facility would have adequate storage space for 12 H-70 fuel containers, each 6.7 gallons; however, there would be no permanent personnel office space, as per safety requirements.

In the past, medical and pharmaceutical services were only offered to active-duty personnel on base; however, previous economic analyses indicated that on-base medical facilities, including a medical pharmacy, would be a cost-effective alternative to off-base medical care and pharmaceutical needs for active duty personnel, their families, and military retirees. Locating a retail pharmacy adjacent to other on-base retail activities (i.e., base commissary and exchange) should provide ease of customer access, synergy with current customer flows, greater availability, and leadership endorsement. Previously, medical needs, including pharmaceutical, of on-base active duty COANG personnel were met at the medical clinic located at Building 600 (see Figure 1-2). Currently, the 460th Medical Squadron is leasing off-base space (541 Norfolk Street in Aurora) to provide pharmaceutical services to active duty military, their families, and military retirees. In addition, primary medical care facilities for active duty personnel are located off base at the Medical Center of Aurora, North Campus facilities.

1.4 SCOPE OF THE ENVIRONMENTAL ASSESSMENT

As mentioned previously, during the initial scoping process, five military construction actions planned for FY 03 were to be considered within one EA. Due to changes in construction scheduling and scope of individual actions, this EA only addresses the military construction of an H-70 storage facility, the demolition of the existing H-70 storage facility, and the military construction of a medical pharmacy.

This analysis addresses the potential impacts to hydrologic resources; air quality; noise; biological resources, including vegetation, wildlife, and protected species; social and economic resources, including environmental justice; land use and transportation; public services and utilities; hazardous materials and substances; soils; and historic or archeological resources. The regulatory requirements for each of the mentioned resource areas are also identified, as well as the existing conditions of each resource area.

The NEPA and CEQ regulations require that the environmental effects of proposed actions and alternatives be considered in the decision-making process. Preparation of an environmental document (this EA) must precede final decisions regarding the proposed action, and be available to inform decision-makers and the public of potential environmental consequences/impacts. The development of this EA allows for public consideration and input concerning the implementation of the proposed military construction of a new H-70 fuel storage facility, the demolition of the existing H-70 storage facility, and the military construction of a new medical pharmacy at BAFB. This EA provides the decision-makers and the public with the information required to understand the possible future environmental consequences/impacts of the

implementation of the proposed action or alternatives. The decision to be made, after a review of the analysis presented in this EA, would be whether to issue a finding of no significant impact (FONSI) or to proceed with the implementation of an environmental impact statement (EIS) to further quantify and detail the potentially significant impacts resulting from implementation of the proposed action or alternatives. While this EA provides information with which to make better decisions about proposed actions, it does not imply project approval or authorization, which is obtained through the 460 ABW Facilities Board.

1.5 ORGANIZATION OF THE ENVIRONMENTAL ASSESSMENT

This document follows the format established in 32 CFR §989 implementing the CEQ regulations (40 CFR §1502). The document consists of the following sections:

Section 1.0 – Purpose of and Need for the Action: presents a brief description of the background of the installation; the past, present, and reasonably foreseeable future actions on BAFB; the purpose and need for the proposed action; the scope of the environmental review; and a brief description of the EA organization.

Section 2.0 – Alternatives Including the Proposed Action: provides a detailed description of the selection criteria and descriptions of the proposed action and alternatives. Section 2.0 also contains an alternatives comparison matrix.

Section 3.0 – Affected Environment: presents the existing baseline environment or present condition of the area(s) potentially affected by the proposed action and/or alternatives. Each environmental resource potentially impacted by the implementation of the proposed action and/or alternatives is discussed, as well as the regulatory background, if applicable, for each impacted resource area.

Section 4.0 – Environmental Consequences: provides the scientific and/or analytical basis for comparing the alternatives and describes the probable consequences of each alternative on relevant environmental attributes.

Section 5.0 – List of Preparers: provides a list of the document preparers and contributors.

Section 6.0 – Distribution List and Agencies and Individuals Contacted: provides a list of persons/agencies contacted in the preparation of this EA.

Section 7.0 – References: provides a list of references used in the preparation of this EA.

Section 8.0 – Acronyms and Abbreviations: provides a list of applicable acronyms and abbreviations used throughout the text.

Appendices: provide background and supporting information to this EA, as necessary. Appendices included in this EA are Appendix A: USAF Form 813; Appendix B: Photograph Location Map and Photographs; Appendix C: BAFB Black-Tailed Prairie Dog/Burrowing Owl Constraints on Construction Projects; and Appendix D: Environmental Data Resources, Inc. (EDR) Radius Search.

SECTION 2.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION

This section of the EA describes the proposed action and the alternatives developed by BAFB. This section also describes the process used to objectively identify the reasonable alternatives carried forward for detailed environmental analysis, as well as the reasoning for elimination of alternatives. A comparative summary of the proposed action, alternatives, and how they do or do not meet the selection criteria identified in Section 2.1 is also included.

2.1 IDENTIFICATION OF SELECTION CRITERIA

In an effort to satisfy the purpose and need for the proposed action, several selection criteria were developed to compare and contrast alternative ways of fulfilling the objectives of the proposed action in accordance with 32 CFR §989.8(c). Those specific criteria include:

- 1. Locate with access to utilities, such as electricity, water, and sewer. BAFB would like to locate the H-70 fuel storage facility and the medical pharmacy in areas that currently have connections to local utilities. By locating in these areas, BAFB is eliminating the costs associated with extensive utility installation in a previously undeveloped area.
- 2. Locate within a compatible land use zone on BAFB. Due to the industrial nature and potential hazardous conditions of the H-70 fuel storage facility, special consideration must be given to placement of this facility in compatible land use areas. The H-70 fuel storage facility should be located in an industrial land use zone. Areas that would not be considered compatible would be residential and residential-related (i.e., schools, churches, hospitals). The medical pharmacy should be located in a residential-related or retail land use area, in keeping with its commercial/retail capacity.
- 3. Locate the H-70 fuel storage facility within the COANG-licensed area near airfield operations. The H-70 fuel containers removed from incoming aircraft at BAFB would be stored and readied for shipping from the H-70 fuel storage facility. For safety reasons, the H-70 fuel storage facility should be located near airfield operations to reduce the travel distance from the aircraft to the storage facility.
- 4. Locate the H-70 fuel storage facility in close proximity to fire control and fuel response teams. The H-70 fuel storage facility requires a 300-foot explosive arch buffer due to the flammability of H-70 fuel. The H-70 fuel storage facility should be located at such a distance to allow rapid access by the fuel response and fire control teams to minimize damage caused by spills or fires.

- 5. Locate the H-70 fuel storage facility at least 100 feet from public highways, civilian or government leasing areas, public facilities, sewerage treatment plants, and water bodies, including rivers, lakes, or streams. Due to bio-environmental considerations, the H-70 fuel storage facility must be located at least 100 feet from the above-mentioned locations/activities.
- 6. Locate the H-70 fuel storage facility and the medical pharmacy in centralized and easily accessible locations on BAFB. Given the nature of these facilities, they should be located in centralized and easily accessible locations in close proximity to associated activities. The H-70 fuel storage facility should be located in a centralized location, near airfield operations, to minimize the distance H-70 fuel containers are transported on BAFB. The facility should also be located so that stored containers could be easily accessed and removed from BAFB for off-base refurbishment and repair. The medical pharmacy should be located in an area that is easily accessed by active duty personnel and is convenient to military family members and military retirees in the Denver metropolitan area using resources on BAFB.
- 7. Locate the medical pharmacy adjacent to the base commissary and exchange or near other on-base medical services. Since the medical pharmacy would be available to all active duty military members, their families, and military retirees in the Denver metropolitan area, it should be located near other on-base retail and service centers. The base commissary and exchange is a significant benefit for military retirees and military family members in the Denver metropolitan area. Locating the medical pharmacy near this facility would be more convenient for nonactive-duty patrons of the base commissary and exchange. Other acceptable locations for the pharmacy would be adjacent to the current and planned medical facilities at Building 600.
- 8. Should be a cost-effective solution that meets all other selection criteria.

2.2 DESCRIPTION OF THE PROPOSED ACTION

The proposed action would include (1) the construction of an approximately 550-SF single-story, steel frame structure with reinforced concrete foundation, concrete masonry unit (CMU) exterior, and standing seam metal roof with double-walled floor sumps isolated from the sanitary sewer system for the H-70 fuel storage facility to be located at the west end of the main ramp near Building 802 (Appendix B); (2) the demolition of the existing H-70 fuel storage facilities located at Building 310; and (3) the construction of an approximately 4,524 gross SF single-story, steel frame structure with reinforced concrete foundation, CMU exterior, and standing seam metal roof adjacent to the base commissary and exchange for the medical pharmacy (see Appendix B; Figure 2-1).

The proposed action would meet the selection criteria detailed previously. More specifically, this action:

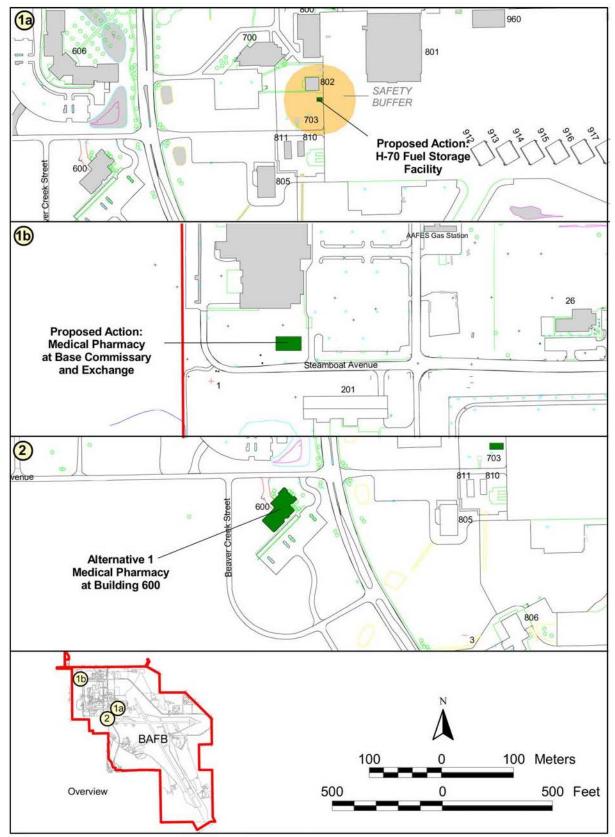


Figure 2-1. Location of the Proposed Action and Alternatives

- 1. Would be located at sites currently equipped with utilities, such as electricity, water, and sewer.
- 2. Would be located at sites within compatible land use zones on BAFB.
- 3. Would locate the H-70 fuel storage facility within the COANG-licensed area near airfield operations.
- 4. Would locate the H-70 fuel storage facility within close proximity to fire control and fuel response teams.
- 5. Would locate the H-70 fuel storage facility at least 100 feet from public highways, civilian or government leasing areas, public facilities, sewerage treatment plants, and water bodies.
- 6. Would locate the H-70 fuel storage facility and the medical pharmacy in centralized and easily accessible sites on BAFB.
- 7. Would locate the medical pharmacy near the base commissary and exchange or other on-base medical services.
- 8. Would be a cost-effective solution that meets all other selection criteria.

2.2.1 H-70 Fuel Storage Facility

2.2.1.1 Demolition/Construction Activities

The footprint of the H-70 fuel storage facility would provide a gross interior capacity of approximately 550 SF and an additional 495 SF for parking or paved safety areas; all construction activities would occur entirely within a 0.5-acre site on BAFB. proposed facility would have sufficient space to store twelve 6.7-gallon H-70 fuel containers and to accommodate needed emergency container repairs to ensure safe Consistent with safety regulations, this facility would not be container shipping. permanently occupied or equipped for permanent occupation. As mentioned previously, the facility would be a single-story, steel frame structure with reinforced concrete foundation and slab, with a split face CMU exterior and standing seam metal roof. Additionally, the concrete floor would be contoured with floor drains leading to a collection/holding tank. The holding tank would be made of concrete and capable of containing a diluted hydrazine and neutralizer solution (chlorine compound) to handle any spills occurring during emergency repairs to prepare the H-70 fuel containers for shipping and/or runoff water that occur from the facility's floor drains. The H-70 fuel storage area would be maintained at a temperature of less than 49 degrees Celsius (°C) and would maintain constant ventilation. The temperature control would be required due to the instability of H-70 if it were to reach 270 °C, which would give a temperature safety range of a factor of five. The facility size would not require a cooling system registered with the State of Colorado for hydro-chloro-fluro-carbon (HCFC)-22 refrigerant due to the refrigerant cooling compressor being less than 100 horsepower. However, the cooling system would be registered on the BAFB refrigerant database. As mentioned previously, there would be no permanent personnel office spaces within the H-70 fuel storage facility. All staff that work in the facility would be assigned to other locations on the installation. No new employment opportunities are expected.

Demolition of the current H-70 fuel storage facilities (Building 310) would occur prior to or concurrently with the construction of the new H-70 fuel storage facility located at the west end of the main ramp. Prior to demolition, any water in the below-grade holding tank would be tested for hydrazine and/or additional pollutants before the water is released into the BAFB drainage system by a licensed and certified contractor. In addition to water testing, the soil would be observed for any signs of contamination and tested for contamination, if necessary. Soil and groundwater samples would be tested for hydrazine and associated products, including, but not limited to, N-nitrosodimethylamine (NDMA). Coordination of sampling would be conducted with the CDPHE, Hazardous Materials and Waste Management Division, if necessary. If contamination were located, proper remediation techniques would be utilized. All demolition debris (including potential asbestos-containing materials [ACMs], lead-based paint [LBP], and polychlorinated biphenyls [PCBs], if present) would be disposed of at an approved off-base landfill in accordance with all applicable federal, state, and local laws and regulations.

Construction of the H-70 fuel storage facility would not begin until Spring 2003 and would last approximately six months. On-site construction equipment could include the use of heavy trucks or the equivalent. Additional light-duty equipment (e.g., generators, compressors, etc.) would also be utilized throughout the duration of activities. equipment would likely come from local sources and would be brought to the site via local roadways. Equipment maintenance would be conducted off site by the contractor and in accordance with all applicable laws and regulations. Construction activities would typically occur 8 hours per day (8:00 a.m. to 5:00 p.m., or the equivalent), 6 days per week (Monday through Saturday). A majority of the construction materials would likely come from local sources and would be stored on site for the duration of activities. No grading plan is currently available; however, preliminary plans indicate that cut-and-fill materials would be balanced so that no new soils would be brought on site or existing soils removed. All construction debris would be disposed of at an approved off-base landfill in accordance with all applicable federal, state, and local laws and regulations. To reduce impacts to local and regional air quality, abatement measures, such as proper maintenance of construction vehicles, limiting the size of the disturbance area to 1.0-acre or less, and watering exposed soils at the beginning and end of daily construction activities with approximately 3,500 gallons, would be implemented.

In accordance with the Supplemental EA of the Proposed Prairie Dog Management Practices at BAFB, dated June 2001, and the BAFB Black-Tailed Prairie Dog/Burrowing Owl Constraints on Construction Projects (Appendix C), black-tailed prairie dog and burrowing owl surveys would be conducted prior to commencement of any construction activities to verify the presence/absence of either black-tailed prairie dogs or burrowing

owls. In areas with known burrowing owl nests, construction activities would be conducted between November and February to avoid any nesting owls. Prairie dogs would be removed prior to commencing construction activities using approved removal methods. If prairie dogs and/or burrowing owls are identified during construction activities, construction activities would be halted and the 460 Civil Engineering Squadron (CES)/Environmental Flight (CEVP) would be contacted for further instructions.

2.2.1.2 Operations

The H-70 fuel storage facility would be large enough to store twelve 6.7-gallon H-70 fuel containers at one time and to accommodate limited emergency repairs. The H-70 fuel storage facility would not be approved to process hydrazine; all reuse and extensive repair to H-70 fuel containers would occur off base. The only activities planned for the facility include H-70 fuel container storage and minor repairs to make the containers safe for shipping to a repair/refueling facility. During minor repair activities, there would be the potential for the release of approximately 6.7 gallons of hydrazine per canister; however, with proper handling, the probability of release is low. Consistent with safety regulations, no space would be provided for permanent occupancy of personnel.

2.2.2 Medical Pharmacy

The footprint of the medical pharmacy would provide a gross interior capacity of approximately 4,524 SF and 4,072 SF for surface parking, and all construction activities would occur entirely within a 1.0-acre site on BAFB adjacent to the base commissary and exchange. As mentioned previously, the facility would be a single-story, steel frame structure with reinforced concrete foundation and slab, with a split face CMU exterior and a standing seam metal roof. Parking would be shared with the base commissary and exchange, as well as the addition of approximately 4,072 SF for parking areas. This facility would include permanent and temporary personnel office spaces; however, all positions would be relocated from the off-site pharmacy location. No new employment opportunities are expected. The lease for the current off-base pharmaceutical activities would not be renewed once construction activities were completed.

2.2.2.1 Construction Activities

Construction of the medical pharmacy would not begin until Spring 2005 and is anticipated to last approximately 18 months. Construction activities would be similar to the activities described for the H-70 fuel storage facility.

In accordance with the National Pollutant Discharge Elimination System (NPDES) Phase II requirements (construction sites between 1 to 5 acres) and the Colorado Department of Public Health and the Environment (CDPHE) requirements, a stormwater permit would be obtained and the conditions of the BAFB Stormwater Pollution Prevention Plan (SWPPP) would be implemented for construction of the medical pharmacy. A notice of intent (NOI) would be filed with the U.S. Environmental Protection Agency (USEPA)

and the CDPHE at least 10 days in advance of construction activities. The SWPPP would be maintained on site and would provide measures to eliminate or reduce any potential impacts to surface water quality in the project area (i.e., implementation of best management practices [BMPs]).

2.2.2.2 Operations

The medical pharmacy would provide pharmaceutical services to all eligible beneficiaries, including active duty personnel, their families, and military retirees in the Denver metropolitan area. The medical pharmacy would provide services Monday through Friday (8:30 a.m. to 5:30 p.m.), except for the last Friday of each month (8:30 a.m. to 3:00 p.m.) when training occurs. The pharmacy would be closed on weekends and federal holidays. All persons who would use the medical pharmacy would have to register prior to filling their first prescription.

2.3 ALTERNATIVES EVALUATION PROCESS

The purpose and need for the proposed action has been examined and documented in Section 1.2. The following analysis of alternatives was prepared to determine which, if any, alternative(s) to the proposed action satisfies that purpose and need statement. Alternatives that did not fully satisfy the purpose and need were not carried forward for detailed analysis in this EA. The alternatives analyzed include:

- No Action
- Locate the Medical Pharmacy at Building 600 and the H-70 Fuel Storage Facility near Building 802 (Alternative 1)
- Locate the Medical Pharmacy Off Base and the H-70 Fuel Storage Facility near Building 802
- Locate the H-70 Fuel Storage Facility near the Current Munitions Area (Site 2) and the Medical Pharmacy On Base
- Locate the H-70 Fuel Storage Facility near Building 1005 (Site 3) and the Medical Pharmacy On Base

The alternatives evaluation utilized a two-tiered evaluation process formulated to concentrate on the purpose and need for the proposed action – (1) to provide storage and limited repair space for H-70 fuel containers, until the containers are transported for reuse or repair, in a location near airfield operations and sufficiently outside noncompatible land uses and (2) to provide an on-installation, centrally located alternative for medical pharmaceutical needs to military personnel, their dependents, and military retirees in the Denver metropolitan area – in an effort to efficiently execute the military mission at BAFB. As the alternatives evaluation proceeded through each tier, the alternatives that did not satisfy all of the criteria were eliminated from further consideration. Those

alternatives that did fully satisfy the criteria continued to be subject to the next set of tier criteria. The following briefly describes the specific evaluation criteria used at each of the two tiers.

- Tier 1 evaluated whether or not the various alternatives would fully meet the purpose and need selection criteria.
- Tier 2 evaluated whether or not the various alternatives would result in adverse environmental impacts.

The second tier of the alternatives evaluation process looked at only one additional action alternative because the other alternatives did not fully satisfy all of the Tier 1 criteria (i.e., the purpose and need for the action). The alternatives eliminated from detailed analysis are briefly discussed in the following section.

2.3.1 Alternatives Eliminated from Detailed Analysis

2.3.1.1 Locate the Medical Pharmacy Off Base and the H-70 Fuel Storage Facility near Building 802

Under this alternative, the medical pharmacy would continue to be located off base in leased space, while the H-70 fuel storage facility would be located near Building 802. The off-base leasing could have potentially fallen under a categorical exclusion due to the current pharmacy being located in off-base leased space and per Appendix B to 32 CFR §989, A2.3.7, "Continuation or resumption of preexisting actions, where there is no substantial change in existing conditions or existing land uses and where the actions were originally evaluated in accordance with applicable law and regulations, and surrounding circumstances have not changed." This alternative was eliminated from detailed analysis in this EA because the medical pharmacy would not be at a site that would be centrally located and easily accessible on BAFB to active duty personnel, who would have to leave the installation to fill prescriptions. Additionally, the medical pharmacy would not be located near other on-base medical services, or adjacent to the base commissary and exchange. This alternative is a cost-effective since military pharmacies have been found to be, on average, 3.5 times cheaper than retail pharmacies for their constituents and the military; however, it would not meet some of the other selection criteria.

2.3.1.2 Locate the H-70 Fuel Storage Facility near the Current Munitions Area (Site 2) and the Medical Pharmacy On Base

Under this alternative, the H-70 fuel storage facility would be located east of the main runway in the current munitions area (Figure 2-2), while the medical pharmacy would also be located on base. Since Site 2 lacks current infrastructure, is not near active airfield operations, and is away from the fuel and fire response teams locations, this alternative was eliminated from detailed analysis in this EA.

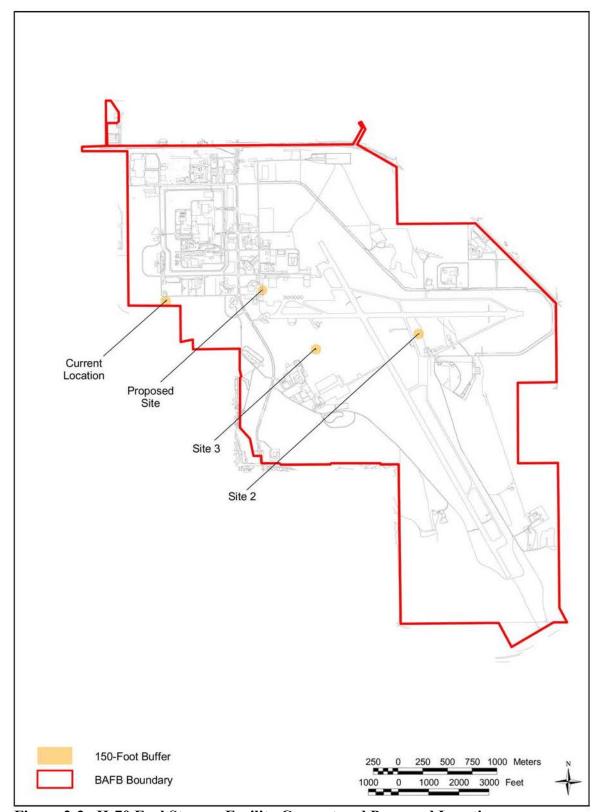


Figure 2-2. H-70 Fuel Storage Facility Current and Proposed Locations

2.3.1.3 Locate the H-70 Fuel Storage Facility near Building 1005 (Site 3) and the Medical Pharmacy On Base

Under this alternative, the H-70 fuel storage facility would be located west of the main runway in the COANG-licensed area, east of Building 1005 (see Figure 2-2); the medical pharmacy would be located on base. Since Site 3 lacks current infrastructure and conflicts with other planned development projects in the area, this alternative was eliminated from detailed analysis in this EA.

2.3.2 Alternatives Carried Forward for Detailed Analysis

2.3.2.1 No Action Alternative

The no action alternative does not satisfy the Tier 1 criteria; however, pursuant to NEPA, the no action alternative has been carried forward as the baseline to which potential impacts of the action alternative can be measured. Under the no action alternative, neither facility would be constructed. The H-70 fuel containers would continue to be stored at Building 310 and the medical pharmacy would continue to be located off base. The no action alternative is inconvenient, is not cost-effective, and increases the probability of spills and leakages due to increased transit of H-70 fuel containers between the airfield and the storage facility.

2.3.2.2 Alternative 1

Under this alternative, the medical pharmacy would be located adjacent to Building 600. The characteristics of the proposed medical pharmacy would be similar to the proposed action (see Section 2.2.2). The H-70 fuel storage facility would be located at the same location as described in the proposed action (see Section 2.2.1). Under this alternative, the medical pharmacy would be located adjacent to the current medical clinic, serving both active-duty USAF and COANG, in Building 600 and adjacent to the planned USAF medical clinic (70,000 SF) near Building 600. This medical pharmacy would serve the same clients as the proposed action. This alternative would meet the selection criteria detailed in Section 2.1. More specifically, this alternative:

- 1. Would be located at sites currently equipped with utilities, such as electricity, water, and sewer.
- 2. Would be located at sites within compatible land use zones on BAFB.
- 3. Would locate the H-70 fuel storage facility within the COANG-licensed area near airfield operations.
- 4. Would locate the H-70 fuel storage facility within close proximity to fire control and fuel response teams.

- 5. Would locate the H-70 fuel storage facility at least 100 feet from public highways, civilian or government leasing areas, public facilities, sewerage treatment plants, and water bodies.
- 6. Would locate the H-70 fuel storage facility and the medical pharmacy in centralized and easily accessible sites on BAFB.
- 7. Would locate the medical pharmacy near other on-base medical services.
- 8. Would be a cost-effective solution that meets all other selection criteria.

2.4 COMPARISON OF THE ALTERNATIVES CARRIED FORWARD

Table 2-1 provides a summary comparison of the alternatives carried forward as they related to the purpose and need criteria presented in Section 2.1.

Table 2-1
Summary Comparison of Proposed Action and Alternatives Carried Forward

Purpose and Need Criteria	Proposed Action	No Action	Alternative 1
Locate with access to utilities, such as electricity, water, and sewer	YES	NO	YES
Locate within a compatible land use zone on BAFB	YES	NO	YES
Locate the H-70 fuel storage facility within the COANG-licensed area near airfield operations	YES	NO	YES
Locate the H-70 fuel storage facility in close proximity to fire control and fuel response teams	YES	NO	YES
Locate the H-70 fuel storage facility at least 100 feet from public highways, civilian or government leasing areas, public facilities, sewerage treatment plants, and water bodies, including rivers, lakes, or streams	YES	NO	YES
Locate the H-70 fuel storage facility and the medical pharmacy in centralized and easily accessible locations on BAFB	YES	NO	YES
Locate the medical pharmacy adjacent to the base commissary and exchange or near other on-base medical services	YES	NO	YES
Should be a cost-effective solution that meets all other selection criteria	YES	NO	YES

SECTION 3.0 AFFECTED ENVIRONMENT

This section of the EA provides a description of the existing environment of the proposed project areas (0.5-acre construction and staging area for the H-70 fuel storage facility and 1.0-acre area for the proposed medical pharmacy adjacent to the base commissary and exchange or 1.0-acre area for the proposed medical pharmacy adjacent to Building 600) that comprises the proposed action and the action alternative under consideration (see Section 2.3). In addition, this section also addresses those resource areas that have been excluded from detailed analysis due to either levels and significance of previous impacts, geographic scale of the resources, or the absence of those resources from the project areas and adjacent areas.

3.1 HYDROLOGIC RESOURCES

3.1.1 Regulatory Requirements

Water resources in this EA include surface water, jurisdictional waters of the United States, floodplains, and physical or biological water quality parameters. The following discussion is a brief synopsis of the regulations protecting these water resources and the potential impacts that could occur to these resources through the implementation of the proposed action and alternatives.

Groundwater resources, as with any hydrologic unit, are vulnerable to contamination and quality degradation. For this reason, the Federal Water Pollution Control Act (FWPCA), as amended by the Clean Water Act (CWA) of 1977, was enacted to protect these resources. The Water Pollution Prevention and Control Act (33 USC 26), also known as the CWA Amendments, set the national policy objective to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The FWPCA provides the authority to establish water quality standards, control discharges into surface and subsurface waters (including groundwater), develop waste treatment management plans and practices, and issue permits for discharges (Section 402) and for dredged or fill material (Section 404). A NPDES permit under Section 402 of the CWA is required for discharges into navigable waters; a Section 404 permit is required for the placement of dredged or fill material in navigable waters; and a Section 10 permit under the Rivers and Harbors Act of 1899 is required for obstruction or alteration of navigable waters. "Navigable waters" have been very broadly defined in USEPA regulations (40 CFR §230) and encompass most bodies of water (including wetlands) and their tributaries. The USEPA is charged with the overall responsibility for Section 402 permits; the U.S. Army Corps of Engineers (USACE) has responsibility for Section 404 permits; and the U.S. Coast Guard has responsibility for Section 10 permits.

Jurisdictional waters, including surface water resources (rivers, streams, tributaries, lakes, wetlands, on-channel ponds, etc.) as defined in 33 CFR §328.3, are regulated under Sections 401 and 404 of the CWA and Section 10 of the Rivers and Harbors Act. Man-

made features not directly associated with a natural drainage, such as upland stock ponds and irrigation canals, are generally not considered jurisdictional waters. Wetlands are those areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for saturated soil (Environmental Laboratory 1987). Waters of the United States (Section 328.3[2] of the CWA) are those waters used in interstate or foreign commerce, subject to ebb and flow of tide, and all interstate waters including interstate wetlands. Waters of the United States are further defined as all other waters such as intrastate lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, natural ponds, impoundments of waters, tributaries of waters, and territorial seas.

A 100-year flood (intermediate regional flood) is defined as a flood level that occurs with an average frequency of once in 100 years at a designated location, although it may occur any year, even two years in a row. The Federal Emergency Management Agency (FEMA) is responsible for implementation and management of the National Flood Insurance Program under 44 CFR; however, local government is responsible for administration of the floodplain within its respective borders. FEMA regulates the impact of vertical development on surface water elevation and flood limits within the floodplain.

3.1.2 Existing Conditions

3.1.2.1 Surface Water

The South Platte River, located approximately 15 miles northwest of BAFB, is the primary surface water drainage in the region. Several smaller intermittent tributaries located within or adjacent to BAFB feed this drainage system. Toll Gate Creek and an old tributary of Murphy Creek are the only named tributaries that are present on the installation. These waterways are intermittent in the vicinity of, and on, BAFB (BANGB 1999). There are no surface water features within or adjacent to the project areas. The project areas are located within developed portions of the installation and are surrounded by engineered street drainage systems. The nearest surface water feature to the proposed H-70 fuel storage facility location is an unnamed tributary to Toll Gate Creek approximately 1,100 feet south (Figure 3-1). Toll Gate Creek, the nearest surface water feature to the proposed medical pharmacy location adjacent to the base commissary and exchange, is approximately 4,000 feet south. An unnamed tributary to Toll Gate Creek is approximately 800 feet south of the proposed medical pharmacy location adjacent to Building 600.

3.1.2.2 Potentially Jurisdictional Waters of the United States

A base-wide jurisdictional determination by the USACE has not been made for BAFB; however, there are no potentially jurisdictional waters of the United States within or

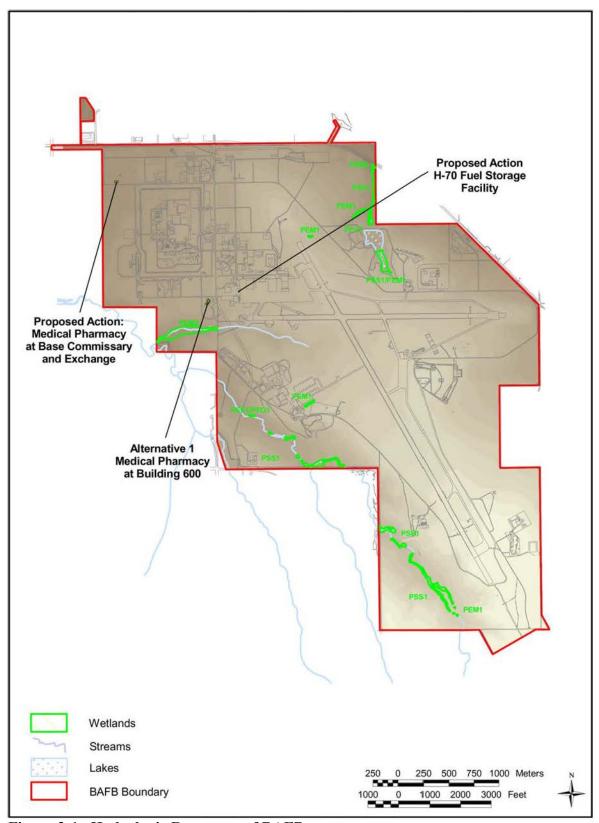


Figure 3-1. Hydrologic Resources of BAFB

adjacent to the project areas. The nearest potentially jurisdictional water of the United States is the unnamed tributary to Toll Gate Creek, which is approximately 1,100 feet south of the proposed H-70 fuel storage facility location and 800 feet south of the proposed medical pharmacy location adjacent to Building 600. Toll Gate Creek is approximately 4,000 feet south of the proposed medical pharmacy location adjacent to the base commissary and exchange, which is also the nearest potentially jurisdictional special aquatic site (e.g., potentially jurisdictional wetland) to all project areas.

3.1.2.3 100-Year Floodplain

As discussed previously, the unnamed tributary to Toll Gate Creek is the closest surface water feature to the proposed H-70 fuel storage facility location and the proposed medical pharmacy location adjacent to Building 600. Floodplain maps are currently available for Toll Gate Creek directly downstream of BAFB. Based on a review of these maps and previous field observations, it is probable that floodplains of this creek on BAFB would be the width of the incised channel or only somewhat wider (BAFB 2002c). Since all of the project areas are greater than 800 feet away from any surface water feature, they would be outside the 100-year floodplains.

3.1.2.4 Physical or Biological Water Quality Parameters

BAFB is located at the headwaters of several streams that are tributaries to the South Platte River. Any materials that enter the waterways could affect the quality of the waters leaving the installation. Potential water contaminants that could be carried in stormwater flows could include fertilizers, pesticides, and pet wastes from lawns; fuel, oil, grease, and coolant that drop onto the pavement from vehicles and aircraft; and deicing chemicals applied to roadways, runways, and aircraft. Other potential contaminant sources include environmental restoration program (ERP) sites, chemical and fuel storage facilities, and golf courses.

BAFB currently protects its watershed through compliance with a number of federal, state, local, and USAF environmental regulations that require the installation to have detailed spill control and response procedures and to implement stormwater pollution prevention BMPs. Specific watershed protection measures used by BAFB include spill cleanup equipment at industrial locations, integrated pest management, and reduction of fertilizer applications. Wastewater generated at the installation is discharged to the sanitary sewer.

3.2 AIR QUALITY

3.2.1 Regulatory Requirements

The Clean Air Act (CAA) (42 USC 7401-7671q), as amended, provides the framework for federal, state, tribal, and local rules and regulations to protect air quality. The CAA gives the USEPA the responsibility to establish the primary and secondary National

Ambient Air Quality Standards (NAAQS) (40 CFR §50) that set safe concentration levels for six criteria pollutants: particulate matter measuring less than 10 microns in diameter (PM₁₀), sulfur dioxide (SO₂), carbon monoxide (CO), nitrous oxides (NO_X), ozone (O₃), and lead (Pb). Primary NAAQS are established to protect public health, and secondary standards provide protection for the public welfare, which includes wildlife, climate, transportation, and economic values (Table 3-1). Additionally, the USEPA also has responsibility for ensuring that air quality standards are met to control pollutant emissions from mobile (i.e., vehicles) and stationary (i.e., factories) sources.

Table 3-1
National Ambient Air Quality Standards

Air		NAAQS		
Pollutant	Averaging Time	Primary ¹	Secondary ²	
СО	1-hour 8-hour	35 ppm 9 ppm	35 ppm 9 ppm	
NO_X	Annual	0.053 ppm	0.053 ppm	
SO_2	3-hour 24-hour Annual	0.14 ppm 0.03 ppm	0.50 ppm - -	
PM_{10}	24-hour Annual	150 μg/m ³ 50 μg/m ³	150 μg/m³ 50 μg/m³	
O_3	1-hour ³ 8-hour	0.12 ppm 0.08 ppm	0.12 ppm 0.08 ppm	
Pb	Quarterly average	$1.5 \mu g/m^3$	1.5 μg/m ³	

Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly.

ppm = parts per million

 $\mu g/m^3$ = micrograms per cubic meter

Source: USEPA 2002

The NAAQS represent the maximum levels of background pollutants that are considered safe, with an adequate margin of safety to protect public health and welfare. Short-term standards (1-, 8-, and 24-hour periods) have been established for pollutants contributing to acute health effects, while long-term standards (annual averages) have been established for pollutants contributing to chronic health effects. Each state has the authority to adopt standards stricter than those established under the federal program; however, the CDPHE Air Pollution Control Division (APCD) accepts the federal standards for the Denver metropolitan area.

Areas that violate NAAQS are designated as "nonattainment" areas, and areas that comply with air quality standards are designated "attainment" areas for the relevant pollutants. "Attainment/maintenance" areas are areas that have previously been designated "nonattainment," and have subsequently been redesignated to "attainment," for a probationary period, due to complying with the NAAQS. Attainment/maintenance

² Secondary standards set limits to protect public welfare, including protection against decreased visibility, and damage to animals, crops, vegetation, and buildings.

³ The ozone 1-hour standard applies only to designated nonattainment areas.

status is achieved through the development and implementation of maintenance plans for criteria pollutants of interest.

The CAA contains the legislation that mandates the general conformity rule to ensure that federal actions in nonattainment and attainment/maintenance areas do not interfere with a state's timely attainment of the NAAQS. The CAA also requires that federal agencies demonstrate that their actions conducted in nonattainment and attainment/maintenance areas conform to the purposes of the State Implementation Plan (SIP).

The general conformity rule divides the air conformity process into two distinct areas: applicability analysis and conformity determination. The applicability analysis process requires federal agencies to determine if their proposed action(s) would increase emissions of criteria pollutants above the threshold levels (40 CFR §93.153). These threshold rates vary depending on severity of nonattainment and geographic location (Tables 3-2 and 3-3). *De minimis* emissions are total direct and indirect emissions of a criteria pollutant that are caused by a federal action in a nonattainment or attainment/maintenance area in less than these threshold rates.

An action is subject to the general conformity rule if the emissions are deemed regionally significant, even if the emissions are *de minimis*. Regionally significant emissions are defined as the total direct and indirect emissions of a federal action for any criteria pollutant that represents 10 percent or more of a nonattainment or maintenance area's emission inventory for that pollutant.

3.2.2 Existing Conditions

BAFB is located in Arapahoe County, Colorado, within the Metropolitan Denver Air Quality Control Region (AQCR 36). The Denver metropolitan area was designated by the USEPA as serious nonattainment for CO, nonattainment for the 1-hour O₃ standard, and moderate nonattainment for PM₁₀; however, the region has received redesignations of attainment/maintenance status effective 14 January 2002 for CO, 11 October 2001 for O₃, and 16 October 2002 for PM₁₀ (APCD 2002).

BAFB has been identified as a major source of criteria pollutants because it has the potential to emit or has actual emissions of more than 100 tons of any single criteria pollutant. BAFB is currently identified by the APCD as a major Title V source of the PM₁₀ precursors NO_X and SO₂ and is subject to Title V Operating Permit No. 950PAR118. This permit was issued on 28 August 1997, most recently reissued as of 01 July 2002, and expires 30 June 2007 (BAFB 2001). In July 2002, the CDPHE performed an inspection of stationary source emission units and determined BAFB was in compliance with the Title V permit.

Table 3-2 Applicability Thresholds for Criteria Pollutants in Nonattainment Areas

Criteria Pollutants/NAA Status	TPY
O ₃ (VOCs or NO _x)	
Serious NAAs	50
Severe NAAs	25
Extreme NAAs	10
Other O ₃ NAAs outside an O ₃ transport region	100
Marginal and moderate NAAs inside an O ₃ transport region	50
VOC	100
CO	
All NAAs	100
SO_2 or NO_x	
All NAAs	100
PM_{10}	
Moderate NAAs	100
Serious NAAs	70
Pb	
All NAAs	25

NAA = nonattainment areas

Table 3-3
Applicability Thresholds for Attainment/Maintenance Areas

Criteria Pollutants	TPY
O_3 (NO _x , SO ₂ or NO ₂)	
All maintenance areas	100
O ₃ (VOCs)	
Maintenance areas inside an O ₃ transport region	50
Maintenance areas outside an O ₃ transport region	100
CO	
All maintenance areas	100
PM_{10}	
All maintenance areas	100
Pb	
All maintenance areas	25

 $[\]overline{TPY} = tons per year$

Source: 40 CFR §93.153

3.3 NOISE

Acoustical noise is defined as any sound that is undesirable because it interferes with communication, is intense enough to damage hearing, or is otherwise intrusive. Human response to noise varies according to the type and characteristics of the noise sources, distance between source and receiver, receiver sensitivity, and time of day. Sound is a physical phenomenon consisting of minute vibrations, which travel through a medium, such as air, and are sensed by the human ear. The ear senses these vibrations as changes in pressure, and as a result sound levels are most commonly referred to as "sound pressure levels."

TPY = tons per year

VOC = volatile organic compound

VOC = volatile organic compounds

Sound levels are expressed in units of decibels. The term decibel (dB) implies a logarithmic ratio of the measured pressure to a reference pressure. This reference pressure refers to a pressure that is just barely detectable by the human ear. The human ear responds differently to sounds at different frequencies. This is demonstrated by the fact that we hear higher pitched sounds more easily than lower ones of the same magnitudes. To compensate for the different "loudness" levels as perceived by humans, a standard weighting curve is applied to measured sound levels. This weighting curve represents the human ear's sensitivity and is labeled "A" weighting. The units of magnitude of the sound level are therefore written as dBA ("A" weighted decibels). All sound levels analyzed in this EA are A-weighted unless otherwise noted.

- Day-Night Average Sound Level. In this EA, the day-night average sound level (DNL) is used to describe noise. The DNL is a cumulative metric that accounts for the total sound energy occurring over a 24-hour period, with nighttime noise weighted more heavily to reflect community sensitivity to noise during nighttime hours. Noise levels in excess of DNL 65 dBA are normally unacceptable for noise-sensitive land uses such as residences, schools, and hospitals. Studies of community annoyance to numerous types of environmental noise show that DNL correlates well with percentages of groups of persons highly annoyed (Fidell et al. 1991).
- *Time Averaged Sound Level.* This metric represents a continuous sound level having the same acoustic energy and time interval as the actual fluctuating sound event.
- *Maximum Sound Level*. The highest A-weighted sound level measured during a single event in which the sound level changes value as time goes on (e.g., an aircraft overflight) is called the maximum A-weighted sound level or maximum sound level.
- Speech Interference. Speech interference associated with construction noise is a cause of annoyance to individuals. The disruption of routine activities such as listening or telephone use gives rise to frustration and irritation. The quality of speech communication is also important in classrooms, offices, and industrial settings and can cause fatigue and vocal strain to those who attempt to communicate over the noise. Research has shown that the use of the sound exposure level (SEL) metric will measure speech interference successfully and that an SEL exceeding 65 dBA will begin to interfere with speech communication.
- Noise Annoyance. Noise annoyance is defined by the USEPA (1972) as any negative subjective reaction on the part of an individual or group. As noted in the discussion of DNL above, community annoyance is best measured by that metric. Because the USEPA Levels Document (USEPA 1972) identified DNL 55 dBA as "...requisite to protect public health and welfare with an adequate margin of safety," it is commonly assumed that 55 dBA should be adopted as a criterion for

community noise analysis. From a noise exposure perspective, that would be an ideal selection. However, financial and technical resources are generally not available to achieve that goal. Most agencies have identified DNL 65 dBA as a criterion which protects those most impacted by noise and which can often be achieved on a practical basis (Federal Interagency Committee on Noise [FICON] 1992). Although DNL 65 dBA is widely used as a benchmark for evaluating potential significant noise impact, and is often an acceptable compromise, it is not a statutory limit and it is appropriate to consider other thresholds for particular cases.

• *Hearing Loss.* Noise-induced hearing loss is probably the best defined of the potential effects of human exposure to excessive noise. Federal workplace standards for protection from hearing loss allow a time-average level of 90 dBA over an 8-hour work period, or 85 dBA averaged over a 16-hour period. Even the most protective criterion suggests a time-average sound level of 70 dBA over a 24-hour period (USEPA 1972). Since it is unlikely that receivers will remain exposed to this level for 24 hours per day for extended periods, there is little possibility of hearing loss below DNL 75 dBA.

3.3.1 Regulatory Requirements

The Noise Control Act of 1972 (Public Law [PL] 92-574) directs federal agencies to comply with applicable federal, state, interstate, and local noise control regulations. In 1974, the USEPA provided information on negative effects of noise and identified indoor and outdoor noise limits that protect public health and welfare. In addition, sound quality criteria promulgated by the USEPA and the U.S. Department of Housing and Urban Development have identified noise levels to protect public health and welfare with an adequate margin of safety. These levels are considered acceptable guidelines for assessing noise conditions in an environmental setting. Average acceptable day-night sound pressure levels fall in a range between 50 dBA in quiet suburban areas and 70 dBA in very noisy urban areas (USEPA 1974).

3.3.2 Existing Conditions

The region of influence (ROI) for the existing noise conditions analysis is the project areas and adjacent land uses on the installation. Existing noise conditions on BAFB are highly influenced by the operational activities of aircraft and by the test run-ups of aircraft engines. In the absence of aircraft activity, noise due to base activities is generated from surface traffic; maintenance and repair facilities; training ranges; heating, ventilation, and air conditioning (HVAC) equipment; and other man-made sources. Additionally, noise is almost entirely restricted to the base.

The project area for the H-70 fuel storage facility is located between the DNL 70 dBA and DNL 75 dBA contour lines on the west side of the airfield, which is generally south of Breckenridge Avenue and one block east of Aspen Avenue (Figure 3-2). The project

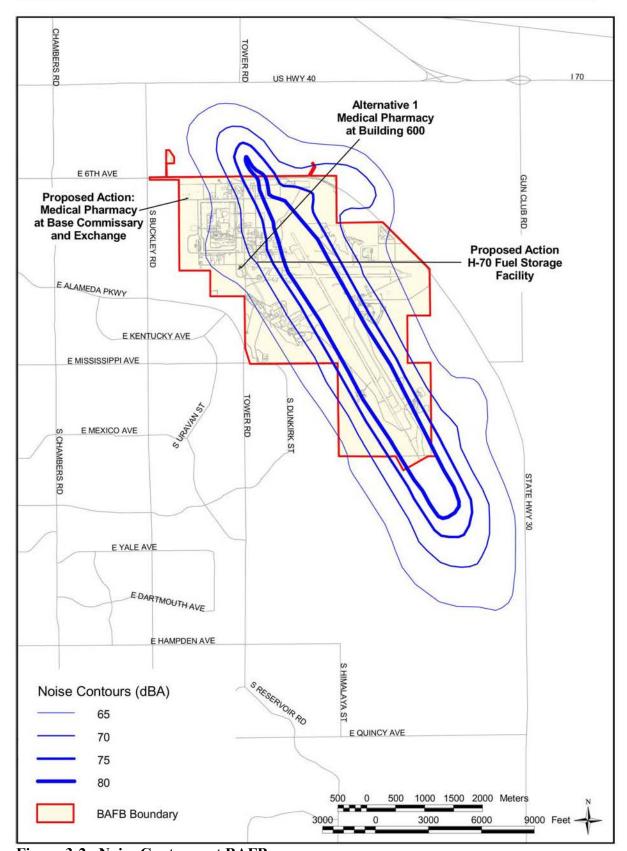


Figure 3-2. Noise Contours at BAFB

area for the proposed medical pharmacy adjacent to the base commissary and exchange is located outside but near the DNL 65 dBA contour. The project area for the proposed medical pharmacy adjacent to Building 600 on Beaver Creek Street, near the southwest corner of Aspen Avenue and Breckenridge Avenue, is located between the DNL 65 dBA and the DNL 70 dBA contours (see Figure 3-2).

3.4 BIOLOGICAL RESOURCES

3.4.1 Regulatory Requirements

Biological resources play an integral role in the natural environment. The CEQ (1993) recognizes that biological resources, and from them biodiversity, are "...not a series of unconnected elements, and that the richness of the mix of elements and the connections between those elements are what sustains the system as a whole." The Endangered Species Act (ESA) of 1973 (PL 93-205), as amended, was enacted to provide a program of preservation for endangered and/or threatened species and to provide protection for ecosystems upon which these species depend for their survival. The U.S. Fish and Wildlife Service (USFWS) is responsible for implementing the ESA within the United States and its territories. The USFWS and the Colorado Division of Wildlife (CDOW) maintain protected species lists (endangered, threatened, proposed candidate, or species of concern) for species that occur or could potentially occur within Arapahoe County.

3.4.2 Existing Conditions

3.4.2.1 Vegetation Communities

The potential climax vegetation community at BAFB would be shortgrass prairie (BAFB 2002c). The historical vegetation at BAFB probably included western wheatgrass (*Agropyron smithii*) with pockets of buffalo grass (*Buchloe dactyloides*), blue grama (*Bouteloua gracilis*), and other grama species (*Bouteloua* spp.). This vegetation is evident in areas that have not been historically seeded with crested wheatgrass (*Agropyron cristatum*) or where the vegetation has reverted to a more native stand.

Vegetation surveys were conducted at BAFB during 2001, and the vegetation was divided into mixed grass-blue grama/western wheatgrass prairie, crested wheatgrass prairie, bottomland meadows, cottonwood/willows, weedy disturbed areas, and landscaped areas. In general, the mixed grass-blue grama/western wheatgrass prairies are the most diverse plant habitats and occur primarily on upland areas; the crested wheatgrass prairies are more uniform and have few other species associated with them (BAFB 2002c). The seeded crested wheatgrass prairies vegetation type is the largest mapped type on BAFB and is the type mapped for the project areas; however, the project areas have been previously disturbed and the density of vegetation is low.

Disturbed areas at BAFB consist of two types: (1) areas disturbed by an excess capacity of prairie dogs and (2) areas disturbed during construction (e.g., project areas). These

areas are populated by a mix of fringed sagewort (*Artemesia frigida*), cheatgrass (*Bromus tectorum*), field bindweed (*Convolvulus arvensis*), Canada thistle (*Cirsium arvense*), and Russian thistle (*Salsola kali*). In addition, some disturbed areas are populated by Dalmatian toadflax (*Linaria genistifolia* ssp. *dalmatica*) and leafy spurge (*Euphorbia esula*).

3.4.2.2 Threatened and/or Endangered Species

A list of protected and sensitive species that potentially occur in Arapahoe County is presented in Table 3-4. Federal and state-listed species, including candidate and species of concern, which have been observed at BAFB include bald eagle (*Haliaeetus leucocephalus*), western burrowing owl (*Athene cunicularia*), and black-tailed prairie dog (*Cynomys ludovicianus*). Although these species have been observed within the borders of BAFB, there have been no observations of these species or their habitat near the project areas. It is doubtful that the remainder of the species listed in Table 3-4 would occur on BAFB other than as migrants or transient visitors (BAFB 2002c; Fayette et al. 2000).

3.5 SOCIAL OR ECONOMIC RESOURCES (INCLUDING ENVIRONMENTAL JUSTICE)

3.5.1 Regulatory Requirements

Socioeconomic analyses generally include detailed investigations of the prevailing population, income, employment, and housing conditions of a community or area of interest. The socioeconomic conditions of a ROI could be affected by changes in the rate of population growth, changes in the demographic characteristics of a ROI, or changes in employment within the ROI caused by the implementation of the proposed action. In addition to these characteristics, populations of special concern, as addressed by Executive Order (EO) 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 1994), are identified and analyzed for environmental justice impacts.

EO 12898 requires a federal agency to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high human health or environmental effects of its programs, policies, and activities on minority populations and low income populations." A memorandum from the President concerning EO 12898 stated that federal agencies should collect and analyze information concerning a project's effects on minorities or low-income groups, when required by NEPA. If such investigations find that minority or low-income groups experience a disproportionate adverse effect, then avoidance or mitigation measures are to be taken.

According to the CEQ (1997a), a minority population can be described as being composed of the following population groups: American Indian or Alaskan Native, Asian

Table 3-4
Federal and State-Listed Species Potentially
Occurring in Arapahoe County, Colorado

Common Name (Scientific Name)	Habitat Preferences/ Reason for Decline	Federal Status	State Status	Potentially Suitable Habitat Present?
	BIRDS			
Bald eagle* (Haliaeetus leucocephalus)	Sea coasts, rivers, and large lakes; nests in tall trees or cliffs near water/habitat destruction, illegal shooting, pesticides	Т	Т	Yes
Interior least tern** (Sterna antillarum)	Sandy/pebbly beaches, inland river sandbars for nesting and shallow water for foraging/riverine alterations, habitat loss, nest disturbance	NL	Е	No
Mountain plover** (Charadrius montanus)	Prairie grasslands, arid plains, and fields; nesting plovers choose shortgrass prairies grazed by prairie dogs, bison, and cattle, and overgrazed tall grass and fallow fields/habitat loss, overgrazing, predation	PT	SC	Yes
Mexican spotted owl** (Strix occidentalis lucida)	Lower elevation forests mostly in deeply incised, rocky canyons; complex forest structures that contain uneven-aged, multi-level, and old-aged thick forests/logging, catastrophic wildfire	Т	Т	No
Piping plover** (Charadrius melodus)	Sandy lakeshore beaches, sandbars within riverbeds, and sandy wetland pastures, all of which must be sparsely vegetated/habitat alteration and destruction, recreational activities near nesting sites	NL	Т	No
Western burrowing owl* (Athene cunicularia)	Primarily found in grasslands and mountain parks, usually in or near prairie dog towns; also uses well-drained steppes, deserts, prairies, and agricultural lands/urbanization, decimation of prairie dog populations	NL	Т	Yes
	MAMMALS			
Black-footed ferret** (Mustela nigripes)	Closely associated with prairie dog habitat; utilizes prairie dog burrows for nesting/habitat loss, poisoning, canine distemper, plague	E	Т	Yes
Black-tailed prairie dog* (Cynomys ludovicianus)	Short-grass prairie, they avoid heavy brush and tall grass areas/habitat loss, sport hunting, extermination by ranchers/farmers	С	SC	Yes
Preble's meadow jumping mouse** (Zapus hudsonius preblei)	In and near densely vegetated, shrub-dominated riparian areas/habitat loss	Т	SC	Yes
	PLANTS		·	•
Colorado butterfly plant** (Gaura neomexicana coloradensis)	Sub-irrigated, alluvial soils of drainage bottoms surrounded by mixed grass prairie; elevation 5,800-6,200 feet/vegetative succession, haying, grazing, herbicide spraying, urban expansion	Т	R/S1	No
Ute ladies'-tresses** (Spiranthes diluvialis)	Open wetland and riparian areas with permanent sub-irrigation; early successional riparian habitats such as point bars, sand bars, and low-lying gravelly, sandy, or cobbly edges/alteration of hydrology, invasive plants, habitat loss, low reproductive rate, loss of pollinators	Т	R/S2	No

* = Known to occur at BAFB

** = Not likely to occur at BAFB

E = Federally or state-listed candidate species E

= Federally or state-listed endangered species

PT = Proposed threatened S1 = Critically endangered in state R = State-listed as rare S2 = Endangered or threatened in state

SC = State-listed special concern species (not a statutory category)

T = Federally or state-listed threatened species

NL = Not listed (species may be federally protected, but is not listed by the USFWS as potentially occurring in Arapahoe County)

Sources: CDOW 2002a, 2002b, 2002c; USFWS 2002

or Pacific Islander, Black, not of Hispanic origin, or Hispanic, and exceeding 50 percent of the population in an area or the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population. Race and ethnicity are two separate categories of minority populations. A minority population can be defined by race, by ethnicity, or by a combination of the two distinct classifications.

Race as defined by the U.S. Census Bureau (2001) includes:

- White A person having origins in any of the original peoples of Europe, the Middle East, or North Africa;
- Black or African American A person having origins in any of the Black racial groups of Africa;
- American Indian or Alaska Native A person having origins in any of the original peoples of North and South America (including Central America) and who maintain tribal affiliation or community attachment;
- Asian A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, or the Philippine Islands; and
- Native Hawaiian and Other Pacific Islanders A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

The U.S. Census Bureau (USCB) defines ethnicity as either being of Hispanic origin or not being of Hispanic origin. Hispanic origin is defined as "a person of Cuban, Mexican, Puerto Rican, South or Central America, or other Spanish culture or origin regardless of race" (USCB 2001).

A minority population can be defined in multiple ways; for example, a population under consideration may be demographically composed of 45 percent Black, 6 percent Asian, 40 percent White, and 9 percent all other races or combination of races. Additionally, a minority population can also be defined through ethnicity, where the population under consideration is demographically composed of 80 percent White, 10 percent Black, and 10 percent all other races or combination of races, but has an ethnic composition of 98 percent Hispanic origin and 2 percent of the population not of Hispanic origin. Race and ethnicity each individually total a population of 100 percent.

Each year the USCB defines the national poverty thresholds, which are measured in terms of household income dependent upon the number of persons within the household. Individuals falling below the poverty threshold (\$12,674 for a household of four in 1990) are considered low-income individuals. USCB census tracts where at least 20 percent of the residents are considered poor are known as *poverty areas* (USCB 1995). When the percentage of residents considered poor is greater than 40 percent, the census tract becomes an *extreme poverty area*.

3.5.2 Existing Conditions

According to the USCB 2000 Census information, BAFB is located in USCB Census Tract 71.02, Block Group 9, Arapahoe County, Colorado (USCB 2002). In the 1990 Census, BAFB was located in USCB Census Tract 71, Block Group 1 (USCB 1993).

3.5.2.1 Population

The general population of Arapahoe County increased by 96,456 persons or 24.6 percent between 1990 and 2000, totaling 487,967 persons (USCB 1993, 2002). Both the urban and rural components of the population increased. The urban component increased 25 percent to 478,124, and the rural component increased 8.5 percent to 9,843; however, this increase was offset by a decrease in the farm population of 27.1 percent to 425 persons (USCB 1993, 2002). Demographically in 2000, the general population of Arapahoe County was 79.7 percent White, 7.4 percent Black, 3.8 percent Asian, and 9.0 percent all other races or combination of races (USCB 2002). The Hispanic population accounted for 11.8 percent of the total population (USCB 2002). The total minority population in Arapahoe County for 2000 was 127,780, or 26.2 percent of the general population.

The general population of USCB Census Tract 71.02 was 3,619 in 2000 (USCB 2002). Demographically in 2000, this population was 86.2 percent White, 2.8 percent Black, 2.3 percent American Indian or Alaska Native, 3.2 percent Asian, and 5.6 percent all other races or combination of races (USCB 2002). The Hispanic population in this census tract accounted for 8.0 percent of the total population (USCB 2002). The total minority population of this census tract in 2000 was 645, or 17.8 percent of the general population (USCB 2002). More specifically, the total population of USCB Block Group 9 was 250 persons (USCB 2002). This population was, demographically, 55.6 percent White, 30 percent Black, 8.8 percent American Indian or Alaska Native, 2.4 Asian, and 3.2 percent all other races or combination of races (USCB 2002). The Hispanic population of this block group was 12, or 4.8 percent of the total population (USCB 2002). The total minority population of this block group was 116, or 46.4 percent of the total population (USCB 2002).

3.5.2.2 Income and Employment

All measures of median income (household income, family income, and non-family income) increased by greater than 40 percent in nominal terms between 1990 and 2000 in Arapahoe County (USCB 1993, 2002). Median household income increased by approximately \$16,336 to \$53,570 (USCB 1993, 2002). Median family income increased by approximately \$19,001 to \$63,875, while median non-family income increased by approximately \$11,521 to \$35,116 (USCB 1993, 2002). Per capita personal income increased by approximately \$9,370 to \$28,147 (USCB 1993, 2002). Median household income in 2000 in USCB Census Tract 71.02 was \$53,893, while the median family and non-family incomes were \$59,022 and \$24,934, respectively (USCB 2002). Per capita personal income was \$23,435 in 2000 (USCB 2002). In Block Group 9, the median

household income was \$26,667, while median family and non-family incomes were \$41,250 and \$16,875, respectively (USCB 2002). The per capita personal income was \$12,114 in 2000 (USCB 2002).

Earnings data in Arapahoe County between 1990 and 2000 revealed a 124 percent increase in nominal personal income (Bureau of Economic Analysis [BEA] 2002a). Nonfarm personal income increased 124 percent to approximately \$21.6 billion in 2000 (BEA 2002a). Farm income increased 447 percent to approximately \$1.7 million in 2000 (BEA 2002a). The industries with the highest percent increase in earnings between 1990 and 2000 were State Government (325 percent); Transportation and Public Utilities (297 percent); Finance, Insurance, and Real Estate (FIRE) (264 percent); and Agricultural Services (211 percent) (BEA 2002a). The only industry reporting a loss of earnings between 1990 and 2000 was Mining (19.1 percent) (BEA 2002a).

Between 1990 and 2000, total full-time and part-time employment increased 62 percent to 389,723 jobs in Arapahoe County (BEA 2002b). The largest percentage employment gains between 1990 and 2000 were in Construction (163 percent); Transportation and Public Utilities (130 percent); State Government (123 percent); and Agricultural Services (108 percent) (BEA 2002b). Two industries reported a percentage loss of jobs, Mining (41 percent) and Farms (15 percent) (BEA 2002b).

Poverty status between 1990 and 2000 in Arapahoe County remained approximately constant at 5.8 percent below the poverty threshold (USCB 1993, 2002). The poverty rate in USCB Census Tract 71.02 was 7.4 percent in 2000, while Block Group 9 had a poverty rate of 8.6 percent (USCB 2002).

3.5.2.3 Housing

The number of housing units in Arapahoe County increased by 28,170 units or 16.7 percent between 1990 and 2000 (USCB 1993, 2002). The occupancy status in 2000 increased to 97 percent, a 5.3 percent increase over the occupancy rate in 1990 (USCB 1993, 2002). Median gross rent increased 58.7 percent between 1990 and 2000 in Arapahoe County to \$735 per month (USCB 1993, 2002). The median value of owner-occupied housing increased by \$79,200, or 85.6 percent between 1990 and 2000 in Arapahoe County (USCB 1993, 2002). The number of housing units in USCB Census Tract 71.02 was 1,256 in 2000, while in Block Group 9 the number of housing units was 27 (USCB 2002).

3.6 LAND USE AND TRANSPORTATION

3.6.1 Regulatory Requirements

Important components of the human built environment include transportation networks, current and future planned land uses, and public services and infrastructure including schools, health care facilities, fire, police, and utilities. Transportation resources include

all road networks and public transportation services (e.g., buses and trolleys) within the immediate project area. Implementing the proposed action or alternatives could slow or reroute traffic through arterial and major thoroughfares. As transportation networks expand, land use patterns develop. As with other resources, land is not available in unlimited quantities. Because of this, land use must be properly planned and controlled. The CEQ regulations recognize this need for the rational management of land resources and have provided for a specific consideration of the relationship of a changed pattern in land uses, which requires knowledge and understanding of existing and projected land capabilities and land use patterns.

Land use patterns are natural or imposed configurations resulting from spatial arrangement of the different uses of land at a particular time. Land use patterns typically evolve as a result of: (1) changing economic considerations inherent in the concept of highest and best use of land, (2) imposing legal restrictions (zoning) on the uses of land, and (3) changing (zoning variances) existing legal restrictions. The critical consideration is the extent to which any changes in land use patterns resulting from implementation of an action are compatible with existing adjacent uses and are in conformity with approved or proposed land use plans. Land use describes the activities that take place in a particular area and generally refers to human modification of land, often for residential or economic purposes. It also refers to use of land for preservation or protection of natural resources. It is important as a means to determine if there is sufficient area for proposed activities and to identify any potential conflicts with local land use plans. resources refer to the aesthetic appearance of a setting, both artificial and natural. It includes the existing landscape and addresses the potential viewers of and from the project areas. Implementing the proposed action or alternatives could affect adjacent sensitive land uses, such as recreational or residential uses.

At the USAF installation level, a General Plan is prepared to guide future development while maintaining a focus on the missions and tenant support activities that occur on a military base. The General Plan incorporates detailed databases, documents, and graphics prepared by USAF regulatory programs. Prior to the beginning of specific construction projects on an USAF installation, a detailed analysis of the project area occurs. Among the factors examined are the ongoing constraints to any development that are imposed by the airfield safety areas, ordnance storage safety areas, environmentally sensitive sites, and sites contaminated from previous activities that require remediation of environmental deficiencies. To address the unique set of accident potential and aircraft noise considerations raised by ongoing operations at its airfields, the USAF provides land use recommendations to adjacent localities and its own facilities planning boards through the Air Installation Compatible Use Zone (AICUZ) Program. The guidelines recommend land uses that are compatible with airfield operations while allowing maximum beneficial use of adjacent properties (USAF 1999).

3.6.2 Existing Conditions

3.6.2.1 Land Use

BAFB lies adjacent to the City of Aurora, approximately 8 miles east of the Denver/Aurora corporate boundaries in Arapahoe County. As such, BAFB is part of an inner suburb of a large city. Accordingly, the area has a suburban character with motor vehicles providing the principal means of transportation and influencing the design of the roadways, land uses, site layouts, and building designs. BAFB is bounded on the northeast by Colorado State Route 30 (6th Avenue), directly east and south by privately held real estate and the Plains Conservation Center, and on the west by undeveloped land owned by the City of Aurora and the State of Colorado (Tower Road, Buckley Road). An airfield has been active at BAFB since the early 1940s.

With a contiguous landmass of approximately 3,250 acres, and its attributes as host to a significant commuter employee population and service center for a military retirees population, BAFB is a significant land use in its own right. BAFB functions as a compact community of interest and has many characteristics of a small city. As the 460 ABW continues its new role as host unit for the installation with the resulting base population growth and facilities construction, this aspect will become more pronounced.

The land uses along the northern boundary of BAFB are largely industrial; however, there is a significant amount of open space and grassland conservation area. To the east, the land is largely unimproved with a scattered commercial and industrial character. To the south, the land is less developed, with a conservation area. To the west, the land uses are generally commercial along the primary and arterial streets and residential on the secondary streets. The City of Aurora is rapidly growing from west to east, and its development is expected to continue its progression from around BAFB toward the less developed areas to the east. Two significant factors account for this growth: the opening of the Denver International Airport, 10 miles northeast of BAFB, and the development along the E-470 Bypass.

Currently, BAFB lacks many of the amenities associated with an active-duty USAF installation. The closure of nearby Lowry AFB in 1994 and Fitzsimons Army Medical Center in 1999 is resulting in a consolidation of functions on BAFB and a consequent need for additional facilities construction. The existing land use pattern on BAFB generally is that the COANG and reserve facilities are east of Aspen Avenue, and the active-duty facilities are on the west side. Most of the development focus on BAFB was in the northwest corner formed by the intersection of the main runway 14/22 and the now-inactive crosswind runway. Over two-thirds of the base land is open space or vacant. Table 3-5 presents the land use categories and approximate sizes on BAFB based on the General Plan (BAFB 2002b).

Land use activities most sensitive to high levels of ambient noise exposure are residential, public services, commercial, and cultural and recreational uses. In airport noise analyses,

Table 3-5
BAFB Land Use Inventory

Land Use Category	Typical Facilities and Features	Total Acres
Administrative	Personnel, headquarters, legal, and other support activities	201
Aircraft Operations /	Aircraft maintenance hangars and docks, control	52
Maintenance	towers, flight training facilities, and flight	
	operations buildings	
Airfield	Associated runway primary surfaces and safety	962
	areas	
Airfield Pavements	Runways, taxiways, and aircraft parking aprons	228
Community Commercial	Commissary, base exchange, service stations,	50
	clubs, chapels, and library	
Community Service	Child care centers and educational centers	91
Housing – Accompanied	Single- and multi-family housing units for	65
	accompanied permanent party service members	
Housing – Unaccompanied	Dormitories and unaccompanied officers' quarters	81
Industrial	Utility systems, building maintenance facilities,	
	and base support supply warehouses	
Medical	Medical centers, clinics, and hospitals	14
Mission Operations and	High security areas	169
Maintenance (Admin)		
Open Space	Buffer areas and out-lease areas	716
Outdoor Recreation	Swimming pools, tennis courts, golf course, and	377
	other active recreation facilities	
Water	Rivers, lakes, and streams	8

Source: BAFB 2002b

noise contours are typically used to determine compatibility of aircraft operations with local land uses. This would include on-base land uses. The predicted noise exposure level is shown in the General Plan and is one of the constraints recognized in siting construction projects. Based on guidelines adopted jointly by the Federal Aviation Administration, the Department of Defense, and the USEPA, any land use lying in an area of less than DNL 65 dBA noise exposure is thought to be compatible. Between DNL 65 dBA and DNL 80 dBA, the mix of compatible uses changes to the point that very few uses are compatible at the higher end of the range. Table 3-6 presents the relationship between airfield operations (accident potential zones), recommended land use classifications, and noise exposure levels.

Section 3.3, Noise, presents a discussion of noise terminology and metrics. As mentioned previously in Section 3.3, the project area for the H-70 fuel storage facility is located between the DNL 70 dBA and the DNL 75 dBA contours on the west side of the airfield, which is generally south of Breckenridge Avenue and one block east of Aspen Avenue. The project area for the proposed medical pharmacy adjacent to the base commissary and exchange is located outside but near the DNL 65 dBA contour. The project area for the proposed medical pharmacy adjacent to Building 600, near the southwest corner of Aspen Avenue and Breckenridge Avenue, is located between the DNL 65 dBA and DNL 70 dBA contours.

Table 3-6
Land Use, Noise, and Accident Potential Compatibility Guidelines

Generalized	Clear DNL Noise Contours (dBA)						
Land Use	Zone	APZ I	APZ II	65-70	70-75	75-80	80+
Residential	No	No	Yes ¹	No ²	No ²	No	No
Manufacturing	No	Yes ³	Yes ³	Yes	Yes	Yes	Yes
Transportation, Communications, and Utilities	No	Yes ³	Yes ³	Yes	Yes	Yes	No
Trade, Business, and Offices	No	Yes ³	Yes ³	Yes	Yes	Yes	No
Shopping Districts	No	No	Yes ³	Yes	Yes	Yes	No
Public and Quasi- Public Services	No	No	Yes ³	Yes	No ²	No ²	No
Recreation	No	Yes ³	Yes ³	Yes	Yes	No	No
Public Assembly	No	No	No	Yes	No	No	No
Agricultural and Mining	No ⁴	Yes ³	Yes ³	Yes	Yes	Yes	Yes

APZ = Accident Potential Zone

Source: USAF 1999

3.6.2.2 Transportation Resources

Transportation resources refer to the infrastructure and equipment required for the movement of people, raw materials, and manufactured goods over water, across the surface of the earth, or through air. Particular emphasis for this analysis is given to the road networks in the region of and on BAFB. The ROI for transportation includes all of the roadways on BAFB and in the immediate vicinity of the base. It also includes the major routes in the area that could be affected by the proposed action.

Interstate 225, the major north-south artery, provides access to and from the Aurora area. Other important road networks providing access to the area are Interstate 25 to the south and Interstate 70 to the north. Interstate 25 is a north-south highway that runs from Texas to Wyoming. Interstate 70 is an east-west highway that runs from Maryland to Utah. Denver International Airport, which is located approximately 17 miles to the north of BAFB, provides worldwide commercial air transportation. Denver Union Station is located approximately 17 miles west of BAFB and offers interstate passenger rail service. The Regional Transport District (RTD) provides mass transit in the Aurora area. The RTD is a public agency created to operate as a public transportation system. The RTD operates in a seven-county service area. RTD Local Route 10 provides daily service throughout the Denver metropolitan area. The RTD has five stops on BAFB along Aspen Avenue (Figure 3-3) (RTD 2002).

¹ Suggested maximum density is 1 dwelling unit per acre

² Unless sound attenuation materials are installed

³ Only limited low-density, low-intensity uses recommended

Limited agricultural uses are permitted

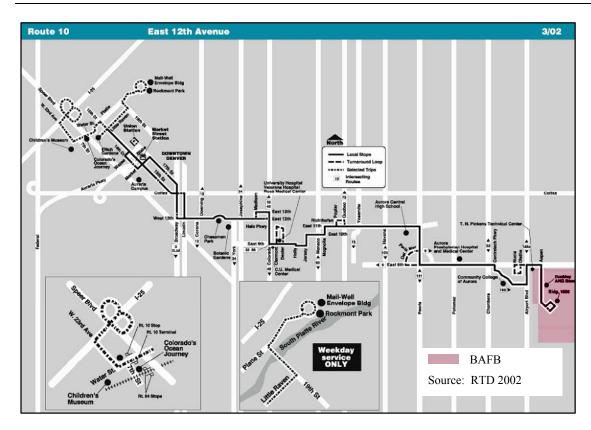


Figure 3-3. RTD Local Route 10

Interstate 225 and the local community are connected to BAFB by two main streets, 6th Avenue to the north and Mississippi Avenue to the south. Access to BAFB is available via gates at the intersections of Aspen Avenue and 6th Avenue (North Gate) and Aspen Avenue and Mississippi Avenue (South Gate). Of the traffic entering and departing the installation, 67 percent uses the North Gate (BAFB 2002b). Aspen Avenue is a 4-lane, divided street running north to south from the North Gate to the central base and continuing around the southeast end of the base to meet Silver Creek Drive just south of the Mississippi Avenue Gate. All vehicles entering and departing the installation must use Aspen Avenue. Breckenridge and Steamboat avenues distribute traffic from Aspen Avenue to the major industrial and flightline areas (BAFB 2002b).

3.7 PUBLIC SERVICES AND UTILITIES

3.7.1 Public Services – Existing Conditions

The surrounding area is comprised of two school districts, Aurora Public Schools and Cherry Creek Public Schools. The Aurora Public School District immediately surrounds BAFB. The Aurora Public School District is the sixth largest district in Colorado with an enrollment of 29,638 (Aurora Public School District 2002). The district is made up of 30 elementary, 7 middle, 4 comprehensive high, 2 alternative, 1 technical center, and 13 preschools. Hartenbach High School (alternative school) and T.H. Pickens Technical

Center are both located on Airport Boulevard, next to the installation. Aurora Central High School is located approximately 7 miles west of BAFB (Aurora Public School District 2002). The City of Aurora is also home to The Community College of Aurora. The Aurora Public Library has seven locations with the main library, Central Library, located for customers north of Mississippi Avenue, south of 6th Avenue, east of Havana Street, and west of BAFB/Airport Boulevard (City of Aurora 2002).

The Aurora Police Department (500 officers) is located on Alameda Drive, less than 4 miles to the west of BAFB. The Aurora Fire Department has approximately 302 uniformed and 43 civilian personnel. Fire Station 5 is located on Airport Boulevard, less than 3 miles to the north of BAFB (City of Aurora 2002). The Medical Center of Aurora, North Campus is located just north of 6th Avenue, less than 3 miles to the west of BAFB and maintains clinics, some diagnostics, and a helipad. The closest full service hospital, Medical Center of Aurora, South Campus, is located neat the intersection of Mississippi Avenue and Interstate 225.

3.7.2 Utilities – Existing Conditions

Xcel Energy provides the main source of electrical energy to BAFB. Six metering points serve various areas of the installation, which is the largest power user from the substation located at the intersection of Colfax Avenue and Interstate 225 (USAF 1998). Xcel Energy also provides the installation with natural gas through a 4-inch gas main located beneath 6th Avenue (USAF 1998).

BAFB obtains potable water from the City of Aurora. Nine reservoirs and lakes provide Aurora with 44.6 billion gallons of storage capacity. Daily water is transported from these reservoirs, natural river systems, pipes, tunnels, and pumps to meet the city's daily needs. Before distribution to the public water supply system, the water is treated and analyzed for various constituents to ensure compliance with federal, state, and local health department standards (City of Aurora 2002).

BAFB wastewater is discharged into the Toll Gate Creek trunk sewer, which is a part of the City of Aurora wastewater collection system (USAF 1998). The wastewater is treated at the Denver Metropolitan Sewage Disposal wastewater treatment plant, which discharges treated effluent to the South Platte River (USAF 1998). Monitored wastewater discharge points revealed that wastewater discharge levels for BAFB range from 3.56 million gallons for months during the winter, spring, and fall to 9.8 million gallons for the summer months, such as July.

BAFB disposed of approximately 1,477 tons of non-hazardous municipal solid waste (MSW) in regulated landfills during FY 02. BAFB diverted approximately 514 tons of MSW and construction debris from regulated landfills through recycling and reuse programs during FY 02.

3.8 HAZARDOUS MATERIALS AND SUBSTANCES

3.8.1 Hazardous Materials and Hazardous Wastes

3.8.1.1 Regulatory Requirements

Concerns over the improper handling and disposal of solid and hazardous wastes that posed a continuing threat to the environment and a danger to human health led to the enactment of the Resource Conservation and Recovery Act (RCRA) of 1976. The RCRA replaced the Solid Waste Disposal Act and authorized the USEPA to provide for cradleto-grave management of hazardous waste and set a framework for the management of nonhazardous municipal solid waste. Under RCRA, a waste is defined as hazardous if it is ignitable, corrosive, reactive, toxic, or listed by the USEPA as being hazardous. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 and the Superfund Amendments and Reauthorization Act (SARA) of 1986 authorize the USEPA to respond to spills and other releases of hazardous substances to the environment. It also authorizes the National Oil and Hazardous Substances Pollution Title III of SARA authorizes the Emergency Planning and Contingency Plan. Community Right-to-Know Act (EPCRA), which requires facility operators with hazardous substances to prepare comprehensive emergency plans and to report accidental releases. EO 12856 (Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements, August 1993) requires federal agencies to comply with the provisions of EPCRA.

Title I of the Toxic Substance Control Act (TSCA) established requirements and authorities to identify and control toxic chemical hazards to human health and the environment. The TSCA authorized the EPA to gather information on chemical risks, require companies to test chemicals for toxic effects, and regulate chemicals with unreasonable risk. The TSCA also singled out PCBs for regulation and as a result are being phased out. The TSCA and its regulations govern the manufacture, processing, distribution, use, marking, storage, disposal, cleanup, and release reporting requirements for numerous chemicals like PCBs. PCBs are persistent when released into the environment and accumulate in the tissues of living organisms. They have been shown to cause adverse health effects on laboratory animals and may cause adverse health effects in humans. TSCA Title IV, "Lead Exposure Reduction," directs federal agencies to "conduct a comprehensive program to promote safe, effective, and affordable monitoring, detection, and abatement of lead-based paint and other lead exposure hazards." Further, any federal agency having jurisdiction over a property or facility must comply with all federal, state, interstate, and local requirements concerning LBP.

3.8.1.2 Existing Conditions

Activities at BAFB that would pose the greatest potential threat to the local environment are the transfer and storage of petroleum, oil, and lubricant (POL) materials and the storage of H-70 fuel. Industrial activities at BAFB fall into four general categories:

aircraft maintenance, vehicle maintenance, facility maintenance, and POL operations. Specific waste streams are generated within each activity. The base has implemented several environmental programs (e.g., spill control and response, stormwater pollution prevention, and hazard waste management) that aid in the prevention of hazardous materials/waste releases to the environment. The installation currently has an ERP to handle contaminated soil and groundwater sites. Ten ERP sites are located on BAFB (Table 3-7 and Figure 3-4).

Two environmental database radius map searches were performed, one centered at the northwest corner of BAFB and one centered near Building 1005 on Aspen Street. The northern search revealed two Resource Conservation and Recovery Information System (RCRIS) small quantity generator (SQG) facilities within 0.25 mile of BAFB: Altec, Incorporated at 641 North Telluride Street, and Dan's Auto Body at 509 Buckley Road, Unit F, neither with any violations. The north database search revealed multiple sites at BAFB that were unmapped due to inadequate address information. Appendix D provides detailed information on these sites.

The southern database search also revealed multiple listings for BAFB. The CERCLA information system listing is a site along the northern installation boundary with groundwater contamination (ERP Site 10). BAFB was also listed as a leaking underground storage tank (UST) site and in the Spills Database for the Department of Public Health and Environment. More specifically, this listing detailed a fuel spill from a 1,000-gallon aboveground storage tank (AST) into a containment area as a result of operator error. The spilled fuel was pumped out by thermal fluids and the case is closed. Additionally, listings for BAFB include a SQG and a finding, which is directly linked to ERP Site 10.

During FY 02, BAFB used approximately 926 pounds of regulated pesticides. Additionally, during this period BAFB used approximately 33 tons of regulated Class I ozone-depleting substances (ODS).

Hydrazine (known as H-70) is a fuel used to operate the F-16 Emergency Power Unit. H-70 tanks are removed from the aircraft at BAFB when the fuel is depleted below a specified level and prepared for shipping to an off-base servicing facility. Hydrazine is toxic, and if the vapor is inhaled, irritation of the respiratory tract can occur. Prolonged exposures can cause damage to liver and kidneys. Contact with body tissues can produce local damage, and ingestion or adsorption of hydrazine through the skin can produce nausea, dizziness, headache, and convulsions. Hydrazine is toxic to aquatic life and disposal into drain sewers is prohibited. The current H-70 fuel storage facility, at Building 310, is located in a noncompatible land use area and has an inadequate explosive arch buffer area.

Table 3-7 ERP Sites on BAFB

ERP			
Site No.	Site Name	Location	Status
1	Former Fire	East of the TACAN	This site does not require further remedial action,
1	Training Area No.	and west of the Rapid	but still requires the state's acceptance of the
	2	Runway Repair Site	NFRAP decision.
2	Oil Pit	North of Mississippi	Remedial investigations found groundwater
		Gate	contaminants at concentrations that exceed
			maximum contaminant levels. A long-term monitoring program would continue through FY 03
			or until the state's acceptance of the NFRAP
			decision.
3	Former Base	North of	This site has been assessed and no significant risk
	Landfill	Mississippi Gate	was found at the site. A long-term monitoring
			program began in FY 98 and would continue up to
			5 years or until the state accepts the NFRAP decision.
4	Former Fire	North of A-Basin	The soil within the burn pit area must be either
	Training Area No.	Avenue and east of	removed or covered. There is not a time limit for
	3	Copper Mountain	this action, and the base has plans to eventually
		Street	cover this area with a paved parking lot. An
			environmental engineering and cost analysis
5	Former Fire	Northeast corner of	involving study and cleanup began in FY 98. This site does not require further remedial action,
	Training Area No.	Monarch Street and	but still requires the state's acceptance of the
	1	Steamboat Avenue	NFRAP decision.
6	Airfield Parking	Airfield parking	This site is closed.
	Apron and	apron and drainage	
	Drainage Ditch to the South of the	ditch to the south of	
	Apron (Building	the apron	
	801)		
7	Former Sewage	North of 6th Avenue	The site's 1992 NFRAP decision needs to be
	Treatment Plant		approved by the state.
8	Aircraft Burial Site	Specific site unknown	This site is closed.
9	UST Burial Site	Adjacent to Building	Cleanup and tank removal activities were
	ODI Dariai Site	903	completed in 1987 in accordance with the Colorado
			UST Program. A NFRAP decision is anticipated.
10	Former	Along the northern	A remedial investigation determined that the site
	Warehouse Area	border of the base	and shallow groundwater are contaminated with
			PCE.

TACAN = Tactical Air Navigation
NFRAP = no further remedial action planned
FY = fiscal year
UST = underground storage tank
PCE = perchloroethylene
Source: BAFB 2002c

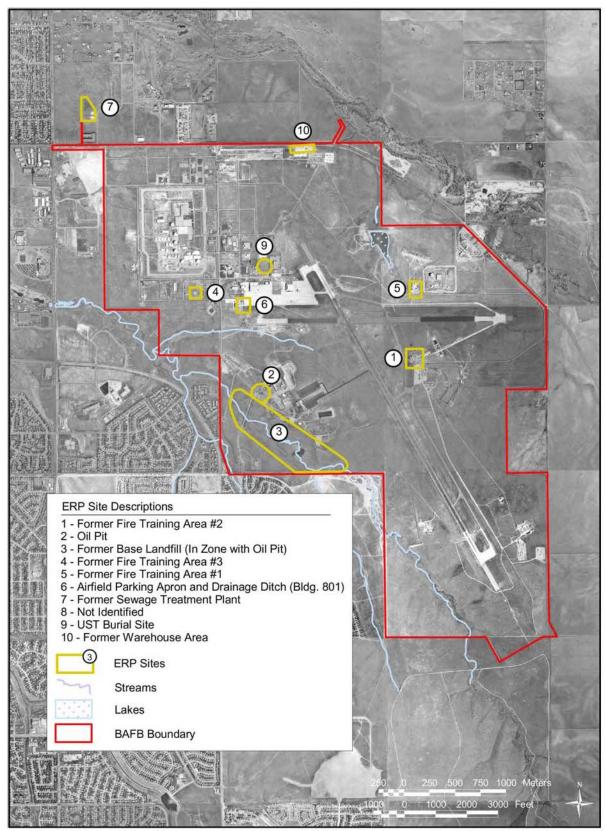


Figure 3-4. ERP Sites at BAFB

3.8.2 Asbestos

3.8.2.1 Regulatory Requirements

ACM and ACM abatement is regulated by the USEPA and the Occupational Safety and Health Administration (OSHA). The State of Colorado also has regulations pertaining to ACM abatement. Emissions of asbestos fibers into the ambient air are regulated in accordance with Section 112 of the CAA, which established the National Emissions Standards for Hazardous Air Pollutants (NESHAP). The NESHAP addresses the demolition or renovation of buildings containing ACM. TSCA Title II provides statutory framework for "Asbestos Hazard Emergency Response," which applies only to schools. The CDPHE, APCD, administers the state's asbestos abatement regulation (Colorado Regulation No. 8, Part B). These regulations cover demolition activities and are more stringent than the NESHAP program. The current USAF practice is to manage or abate ACM in active facilities and abate ACM per regulatory requirements prior to facility demolition. Abatement of ACM occurs when there is a potential for asbestos fiber releases that would affect the environment or human health.

3.8.2.2 Existing Conditions

The project area for the medical pharmacy adjacent to the base commissary/exchange has been disturbed by past construction and demolition activities associated with World War II facilities (Figure 3-5). Asbestos-coated piping associated with these types of older structures has been found in the northwestern corner of the base. Therefore, although the structures have been demolished and removed, there is a low probability that some pipes or other ACMs could be encountered during subsoil activities.

The project areas for the H-70 fuel storage facility and the medical pharmacy at Building 600 have most likely not been disturbed by past construction or demolition activities associated with World War II facilities; however, the soil strata has been disturbed by training or construction activities not associated with pre-ACMs regulations. Therefore, although asbestos-coated piping associated with these types of older structures has been found in the northwestern corner of the BAFB, there is a low probability that any pipes would be encountered during subsoil activities at the project areas.

3.8.3 **Radon**

3.8.3.1 Regulatory Requirements

Radon is an invisible, odorless, radioactive gaseous form of radium and its short-lived decay products are produced by the natural disintegration of the element radium, which occurs in air, water, soil, and other media. If structures show radon levels over 4.0 pico-

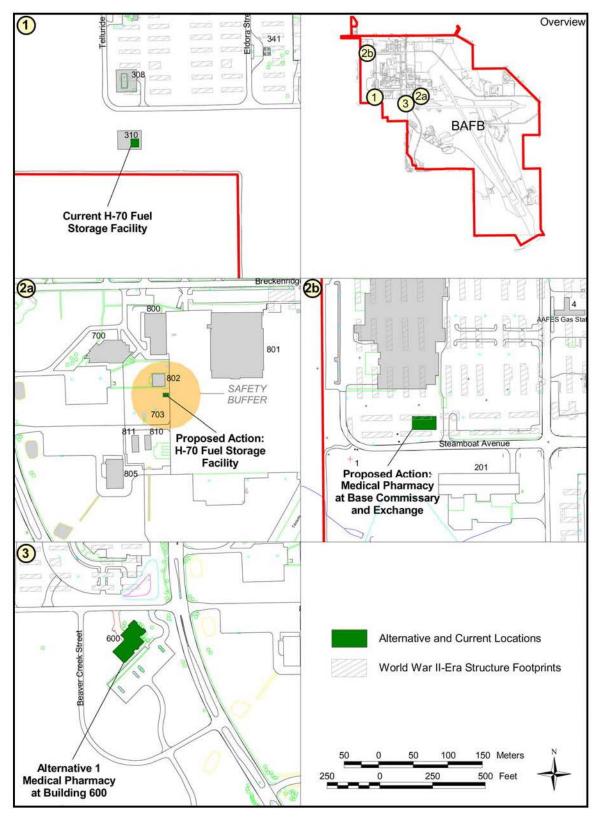


Figure 3-5. Location of World War II-Era Structures in Association with the Proposed Action and Alternatives

Curies per liter (pCi/l), appropriate radon mitigation actions should be implemented. An elevated concentration is defined as being at or above the USEPA suggested guidelines of 4.0 pCi/l. Soil gas entering homes through crawl spaces, through cracks and openings in slab-on-grade floors, and through below-grade walls and floors is the primary source of elevated radon levels. Radon moves into a building due to lower indoor air pressure resulting from heated air rising, wind, air used by fireplaces and wood stoves, or air vented to the outside by clothes dryers and exhaust fans in bathrooms, kitchens, or attics.

TSCA Title III, "Indoor Radon Abatement," states indoor air in buildings of the United States should be as free of radon as the outside ambient air. Federal agencies are required to conduct studies on the extent of radon contamination in buildings they own. In addition to the TSCA, radon is regulated under the Radon Gas & Indoor Air Quality Research Act of 1986 (42 USC §7401), EO 12088 (Federal Compliance with Pollution Standards, October 1978), RCRA, and the Solid Waste Disposal Act (42 USC §6982).

3.8.3.2 Existing Conditions

Arapahoe County is in USEPA Zone 1 for radon, which lists the average indoor radon level as greater than 4.0 pCi/l. Three samples tested for radon in zip code 80011 showed that average activity at basement level for one sample was less than 4.0 pCi/l, while the other two samples were between 4.0 pCi/l and 20.0 pCi/l (EDR 2002).

3.9 RESOURCES ELIMINATED FROM DETAILED ANALYSIS IN THIS ENVIRONMENTAL ASSESSMENT

CEQ regulations (§1501.7) state that the lead agency shall identify and eliminate from detailed study the issues which are not important or which have been covered by prior environmental review, narrowing the discussion of these issues in the document to a brief presentation of why they would not have a dramatic effect on the human environment. In accordance with §1501.7, issues eliminated from detailed study include the following resource areas.

3.9.1 Soils

Due to the disturbed nature of the project areas, it is unlikely that the soil conditions have not been previously impacted. The original soil type of the project areas would have been mapped as Fondis silt loam, 1 to 3 percent slopes. These are well-drained soils occurring mainly on uplands, with a surface layer approximately 7 inches thick and upper clay subsoil about 20 inches thick. These soils have moderate runoff and water intake, and the hazards of soil blowing and water erosion are slight to moderate (U.S. Department of Agriculture [USDA] 1971). Implementation of the proposed action or alternatives would not cause any further significant impacts to the soil resources within or immediately adjacent to the project areas. A review of ERP documentation should be performed prior to commencement of construction activities to identify the potential

presence of contaminated soils. Removal of contaminated soils is discussed in detail in Section 4.7, Hazardous Materials.

3.9.2 Historic or Archeological Resources

Also, due to the disturbed nature of BAFB, there are no intact cultural resources deposits or locations on BAFB. A full account of installation cultural resources and cultural resources management is provided in the Integrated Cultural Resources Management Plan (BANGB 2000).

SECTION 4.0 ENVIRONMENTAL CONSEQUENCES

This section of the EA forms the basis for the comparison of the alternatives identified in Section 2.3. As previously mentioned, the project areas for the proposed action and alternatives consist of a 0.5-acre construction and staging area for the H-70 fuel storage facility near Building 802, a 1.0-acre area for the proposed medical pharmacy adjacent to the base commissary and exchange or a 1.0-acre area for the proposed medical pharmacy adjacent to Building 600. The discussion presented includes the potential environmental impacts from implementing the proposed action and alternatives. Table 4-1 provides a summary of the environmental consequences associated with implementing those alternatives carried forward for detailed analysis. As demonstrated in Table 4-1, none of the alternatives carried forward for detailed analysis would result in significant impacts to the environment.

Table 4-1
Alternatives Comparison Matrix Summary

Environmental Attributes		Proposed	
(Threshold Criteria)	No Action	Action	Alternative 1
Hydrologic Resources			
(number of surface water features affected)	0	0	0
(acres and/or linear feet of potentially jurisdictional waters			
affected)	0	0	0
(change in physical or biological water quality parameters)	No	No	No
(within 100-year floodplain)	No	No	No
(substantial increase in stormwater flow)	No	No	No
(substantial alteration of localized drainage patterns)	No	No	No
Air Quality			
(increase above de minimis standards)	No	No	No
Noise			
(permanent increase to unacceptable levels)	No	No	No
(within compatible noise contour or design adjustments			
made)	Yes	Yes	Yes
Biological Resources			
(acres of vegetation communities affected)	0	1.5	1.5
(number of threatened and/or endangered species affected)	0	0	0
Social and Economic Resources (Including Environmental			
Justice)			
(unacceptable change in personal income or employment)	No	No	No
(number of minority and/or low-income populations			
affected)	0	0	0
Land Use and Transportation			
(consistent with adjacent land uses [current and planned])	No	Yes	Yes
(unacceptable change in level of service)	No	No	No
Public Services and Infrastructure			
(unacceptable change in level of service)	No	No	No
Hazardous Materials and Substances			
(existing solid/hazardous waste and debris removed)	No	Yes	Yes
(number of federal and/or state database-listed sites			
affected)	0	0	0
(ACM removed and remediated, if present)	No	Yes	Yes
(building design minimizes exposure to radon)	N/A	Yes	Yes

4.1 HYDROLOGIC RESOURCES

Implementation of a proposed action and/or alternatives could result in the disturbance of localized surface water features, wetlands/waters of the United States, and/or floodplains through ground-disturbing activities and in an increase of impervious cover within the project areas. Water features could receive silt from or have drainage patterns affected by ground-disturbing activities. Localized water features could also contain federally protected species or support important riparian habitat. Potential effects to water resources in the project areas will be quantified in this EA by acreage and/or linear distance of surface waters affected and/or by an unacceptable rise in the level of physical and biological parameters as defined by the CDPHE. Additional significance thresholds include the creation of excess stormwater runoff that would exceed the capacity of existing or planned stormwater drainage systems, excess stormwater that would result in flooding either on site or off site, and substantial alteration of localized drainage patterns.

4.1.1 No Action

Selecting the no action alternative would result in no significant long-term impacts to hydrologic resources. If current activities are maintained at the present H-70 fuel storage facility, there would be an increased probability of a spill occurring during the transportation of fuel containers, which could impact hydrologic resources, especially surface water features that drain from the installation. Since there would be no construction activities, hydrologic resources would remain as described in Section 3.1.

4.1.2 Proposed Action

Implementing the proposed action would result in no significant long-term impacts to surface water resources, jurisdictional waters of the United States, floodplains, or water quality. As discussed earlier, in accordance with the NPDES and CDPHE requirements, a SWPPP would be implemented to reduce the potential for soil erosion and contaminated stormwater flows due to construction activities. All hazardous materials would be handled according to federal, state, and local guidelines, and all hazardous wastes would be disposed of at an approved landfill to minimize the potential for surface or groundwater contamination from these sources during construction activities. Through implementation of the proposed action, the probability of an H-70 fuel spill would be reduced due to less transit time and reduced handling of materials. Additionally, the design of the facility would include appropriate spill prevention and containment features to reduce the potential for material loss from the site during facility operations.

4.1.3 Alternative 1

Implementing this alternative would result in no significant impacts to hydrologic resources. Potential environmental consequences would be similar to those of the proposed action.

4.2 AIR QUALITY

Impacts to air quality would be considered significant if any criteria pollutant emissions associated with the implementation of the proposed action or alternatives would exceed the rates specified for attainment/maintenance areas for CO, O₃, and PM₁₀ (Table 4-2), would be regionally significant, or would contribute to a violation of the Title V permit limitations.

Table 4-2
Applicability Thresholds for Criteria Pollutants
for Denver Air Quality Control Region (AQCR 36)

Criteria Pollutants	Tons/Year
O_3 (NO _X , SO ₂ or NO ₂)	
All maintenance areas	100
O ₃ (VOCs)	
Maintenance areas inside an O ₃ transport region	50
Maintenance areas outside an O ₃ transport region	100
CO	
All maintenance areas	100
PM_{10}	
All maintenance areas	100

VOC = volatile organic compounds

Source: 40 CFR §93.153

The air quality analysis examined impacts from air emissions associated with the construction and operation of the H-70 fuel storage facility and the medical pharmacy on BAFB. As part of the analysis, emissions generated from construction, motor vehicles, and other (non-mobile) sources were examined for CO, volatile organic compounds (VOCs), SO₂, NO_x, and PM₁₀.

4.2.1 No Action

Selecting the no action alternative would result in no significant impacts to ambient air quality conditions of the project areas or surrounding areas since no construction activities would be undertaken. Ambient air conditions would remain as described in Section 3.2.

4.2.2 Proposed Action

Implementing the proposed action would have a minor, temporary impact on local air quality; however, emissions are not expected to exceed the rates specified for attainment/maintenance areas for CO, O_3 , and PM_{10} , be regionally significant, or contribute to a violation of Title V permit limitations. The primary impact would be directly related to the generation of PM_{10} at and around the project areas during the preliminary stages of construction. These emissions would primarily be a function of (1) construction activities, such as grading and excavation; (2) movement of dust (wind erosion) from 'piled' materials; and (3) mechanical entrainment of road dust.

4.2.2.1 Construction Activities

The potential air quality impact resulting from construction activities would be minor, would be temporary, and would disperse with distance from the project area. Implementing abatement measures such as proper maintenance of construction vehicles, limiting the size of the disturbance area, and watering unpaved roadways, as necessary, would minimize potential impacts.

USEPA AP-42 states that factors for fugitive dust emissions from heavy construction operations can be conservatively expressed in terms of total suspended particulate (TSP). The TSP emissions from construction-based activities depend on a number of considerations including, but not limited to:

- The number and type of vehicles (earthmovers);
- The construction activity (demolition and debris removal, site preparation, and general construction);
- The materials used (asphalt, concrete);
- The controls utilized to minimize fugitive emissions from area sources (watering exposed soils); and
- The installation of asphalt pavement.

Watering the disturbed area twice per day with approximately 3,500 gallons per acre would reduce TSP emissions by as much as 50 percent (USEPA 1995). A PM_{10} emissions factor of 0.6 ton per acre per year (5.18E-5 grams per square meter per second [g/m²s]) was estimated for this activity with sufficient watering (USEPA 1995). Fugitive particle emissions due to the heavy construction activities are the only anticipated stationary sources of emissions during the construction phase of the proposed action. These increases would not significantly contribute to a violation of Title V permit limitations (Table 4-3).

Table 4-3 Construction PM₁₀ **Emissions for Stationary Sources**

PM ₁₀ Emissions	TPY
Baseline ¹	12.0
Proposed Construction	2.2
Projected Total	14.2
Title V Permit Limits	99.9

¹ Total Stationary Source Emissions at BAFB (2001)

TPY = tons per year

The USEPA recommends using the modified Pasquill-Gifford plume model outline in its guidance to "apply a simple screening procedure ... to determine if either (1) the source clearly poses no air quality problem or (2) the potential for an air quality problem exists" (USEPA 1995). As stated previously, construction of the H-70 fuel storage facility and

the medical pharmacy are planned for separate years. This analysis was based on a worst-case scenario with the construction footprint for the medical pharmacy equal to a 1.0-acre site. The SCREEN3 computer model (USEPA) was used to estimate the downwind concentrations of PM_{10} using the following assumptions, and have been illustrated in Figure 4-1.

• Average Wind Speed 3 miles per hour (1.34 meters/second)

Receptor Height 1.5 metersSource Height 10 meters

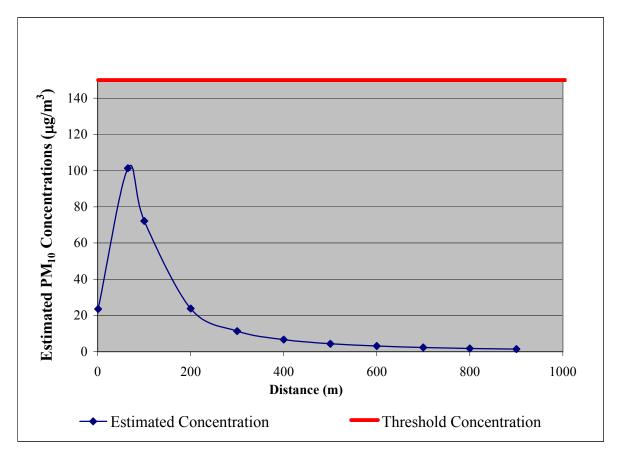


Figure 4-1. Estimated Downwind PM₁₀ Concentrations

The maximum PM_{10} concentration of 101 micrograms per cubic meter ($\mu g/m^3$) at a distance of 65 meters from the fence line was compared to the primary and secondary NAAQS PM_{10} for 24 hours of 150 $\mu g/m^3$. Since the maximum-modeled concentration is below the NAAQS for particulates, a potential for an elevated local concentration for PM_{10} would not be anticipated for this temporary activity. No decrease in visibility and subsequently no impact to airfield operations or aircraft safety would be anticipated for the proposed action. Because the grading and construction activities are low to the ground, these estimated concentrations would drop off rapidly in a short distance; as a result, temporary impacts would be local and not regional. These estimates are averages, and at any instant, actual instantaneous concentration is likely to be higher or lower based on local wind conditions.

Combustive emissions from construction equipment exhausts were estimated using emissions factors for diesel-powered off-road equipment (USEPA 1991; Waier 2001). The USEPA assumes that 230 working days (8 hours per day) are available per year for construction (accounting for weekends, weather, and holidays) (USEPA 1995). Criteria pollutant emissions associated with the implementation of the proposed action or alternatives do not exceed the rates specified for attainment/maintenance areas for CO, O₃, and PM₁₀ (Table 4-4). The proposed action is not regionally significant because the emissions do not exceed 10 percent or more of the attainment/maintenance area's total emissions for that particular pollutant (AQCR 36) (Table 4-5).

Table 4-4
Total Construction Emissions Compared to Applicability Thresholds

Total Collsti uct	y i mi conordo		
Criteria Pollutants	Applicability Threshold (tpy)	Total Construction Emissions (tpy)	Violates Applicability Threshold
NO_x	100	1.3	No
SO_2	100	0.5	No
VOCs	50(100)	0.3	No
CO	100	2.0	No
PM_{10}	100	2.2	No

tpy = tons per year

Table 4-5
Total Construction Emissions Compared to AQCR 36 Total Emissions

Criteria Pollutants	AQCR 36 Total Emissions* (tpd)	Construction Emissions (tpd)	Percent Total	Regionally Significant
NO_x	313	0.0035	0.0011%	No
SO_2	180	0.0013	0.0008%	No
VOCs	507	0.0008	0.0002%	No
CO	1203	0.0054	0.0005%	No
PM_{10}	70	0.0060	0.0086%	No

*Colorado Air Quality Control Commission (CAQCC) 2000, 2001a, 2001b tpd = tons per day

4.2.2.2 Operations

There would be minor indirect emissions from support services after construction completion. Although the relocation of the H-70 fuel storage operations would maintain the same level of support services, additional heating and cooling of the medical pharmacy would be necessary. For a building this size, a conservative estimate of 0.25 million British thermal units (MMBTU) per year would be necessary for heating and cooling of the building. The proposed action would increase basewide natural gas usage by 165,000 cubic feet per year. This would not exceed the rates specified for attainment/maintenance areas for CO, O₃, and PM₁₀, would not be "regionally significant," or significantly contribute to a violation of Title V permit limitations (Table 4-6).

Table 4-6
Emissions from Anticipated Support Services

Constituent	Emission Factor (lb/10 ⁶ ft ³)	Total Increase in Emissions (tpy)
CO	40.0	0.00330
NO_x	94.0	0.00775
PM_{10}	7.6	0.00062
SO_x	0.6	0.00005
VOC, non-methane	5.5	0.00045

lb = pound

Although hydrazine is regulated by the USEPA, the storage of the containers is not expected to have significant impacts to the existing air quality. There is a slight potential for the H-70 fuel to have an air quality impact if there is a leak in a canister; however, safety plans are in place to reduce the risk of any safety concerns, and H-70 fuel degrades rapidly in air through reactions with O₃, hydroxyl (OH) radicals, and nitrogen dioxide (World Health Organization 1987).

There are 188 hazardous air pollutants (HAPs), also known as toxic air pollutants, specifically listed by the USEPA pursuant to Title III of the CAA amendments. HAPs are pollutants that cause or may cause serious health effects and have adverse environmental or ecological effects. HAPs emitted by natural gas boilers include arsenic, cadmium, chromium, lead, manganese, mercury, and nickel. Estimated organic and inorganic HAP emissions that would result from implementing the proposed action, which are estimated at 0.000156 tons per year are listed by individual organic and inorganic component in Tables 4-7 and 4-8.

Table 4-7
Organic HAP Emission Rate Calculations

Constituent	Emission Factor (lb/10 ⁶ ft ³)	Fuel (10 ⁶ ft ³)	Total Increase in HAP Emissions (tpy)
Benzene	2.00E-03	0.165	1.73E-07
Dichlorobenzene	1.00E-03	0.165	9.90E-08
Formaldehyde	7.50E-02	0.165	6.19E-06
Hexane	1.80E-01	0.165	1.49E-04
Naphthalene	6.10E-04	0.165	5.03E-08
Polycyclic Organic Matter	8.85E-05	0.165	7.30E-09
Toluene	3.40E-03	0.165	2.81E-07
Total			1.55E-04

lb = pound

 $^{10^6 = 1,000,000}$

 ft^3 = cubic feet

tpy = tons per year

 $^{10^6 = 1,000,000}$

 ft^3 = cubic feet

tpy = tons per year

Table 4-8 **Inorganic HAP Emission Rate Calculations**

Constituent	Emission Factor (lb/10 ⁶ ft ³)	Fuel (10 ⁶ ft ³)	Total Increase in HAP Emissions (tpy)
Arsenic	2.00E-04	0.165	1.65E-08
Beryllium	1.20E-05	0.165	9.90E-10
Cadmium	1.10E-03	0.165	9.08E-08
Chromium	1.40E-03	0.165	1.16E-07
Cobalt	8.40E-05	0.165	6.93E-09
Lead	5.00E-04	0.165	4.13E-08
Manganese	3.80E-04	0.165	3.14E-08
Mercury	2.60E-04	0.165	2.15E-08
Nickel	2.10E-03	0.165	1.73E-07
Selenium	2.40E-05	0.165	1.98E-09
	<u>.</u>	Total	5.00E-07

The additional HAP emissions constitute less than 0.1 percent of the entire on-base HAP emissions, which is 0.83 tons per year at BAFB. However, the USEPA is proposing national emission standards for HAP emissions (NESHAP) industrial/commercial/institutional boilers and process heaters. The proposed rule would implement Section 112(d) of the CAA by requiring all major sources to meet HAP emission standards reflecting the application of the maximum achievable control technology (MACT) (Federal Register 68:8, Monday, 13 January 2003). BAFB should continually review the regulatory changes in this area to ensure compliance with respect to current, proposed, and reasonably foreseeable future HAP emissions.

4.2.3 Alternative 1

Implementing this alternative would have a minor, temporary impact on local air quality; however, this impact would not be significant. Potential environmental consequences would be similar to those of the proposed action.

4.3 **NOISE**

Noise impact analysis typically evaluates potential changes to existing noise environments that would result from implementation of a proposed action and alternative. Potential changes in the noise environment can be (1) beneficial, if they reduce the number of sensitive receivers exposed to unacceptable noise levels; (2) negligible, if the total area exposed to unacceptable noise levels is essentially unchanged; or (3) adverse, if they result in increased exposure to unacceptable levels. Implementing the proposed action could increase the levels of noise within the immediate project areas through the temporary use of construction equipment. Potential effects will be quantified in this EA

 $^{10^6 =} pound$ $10^6 = 1,000,000$

 ft^3 = cubic feet

tpy = tons per year

by determining if on-site noise levels would increase ambient noise conditions to unacceptable levels or would create long-term conditions that would be unacceptable within specified noise contours. Impacts would be considered significant if, over the long-term, noise levels were above the limits of the established noise contours.

Construction noise is planned to occur for periods of 8 hours a day, Monday through Saturday. According to the OSHA, it is unacceptable for persons to be exposed to noise levels equal to a time-averaged sound level of 90 dBA or higher during an 8-hour period.

4.3.1 No Action

Selecting the no action alternative would result in no significant impact to the existing noise conditions of the project areas and surrounding areas. Under this alternative, there would be no construction activities conducted, and as a result, there would be no change in the current noise environment. Noise-producing activities, which are at or below acceptable levels for their designated noise contours, would remain as described in Section 3.3.

4.3.2 Proposed Action

Implementing the proposed action would result in no significant long-term noise impacts. The primary source of noise would be the equipment associated with construction activities. Heavy machinery, the major source of noise, is constantly moving in unpredictable patterns within the project area; however, operations would normally occur during daylight hours when occasional loud noises are more tolerable. It is expected that in the absence of aircraft noise, the construction noise would dominate and be clearly perceptible at all receivers within the ROI. Noise levels imposed on surrounding buildings would be dependent on the location of equipment within the project area. Under this alternative, construction noise is not expected to exceed the 90 dBA time-averaged sound level as specified by OSHA.

The project areas, as indicated in Section 3.3, are located just outside the DNL 65 dBA (medical pharmacy) and the DNL 70 dBA (H-70 fuel storage facility) contours. Even though maximum sound pressure levels can occasionally be as high as 90 dBA at a distance of 50 feet (and closer), the day-night average sound levels are likely to remain within the 65 dBA to 70 dBA levels.

Construction noise could result in an increased probability of annoyance and speech interference within the ROI. Outdoor receivers within close proximity of the ROI may experience a decrease in speech intelligibility. However, as discussed in Section 2.2, work-hour controls and proper maintenance of muffler systems would be in place to minimize construction noise. As a result, no significant impacts would be anticipated, and upon completion of construction activities and removal of equipment, sound levels should return to those comparable to the levels that existed prior to construction.

4.3.3 Alternative 1

Implementing this alternative would result in no significant noise impacts. Potential environmental consequences would be similar to those of the proposed action.

4.4 BIOLOGICAL RESOURCES

As mentioned previously, the USFWS and the CDOW maintain protected species lists (endangered, threatened, proposed candidate, or species of concern) for species that occur or could potentially occur within Arapahoe County. If species do occur, implementing the proposed action or alternatives could affect these species and their habitat through ground-disturbing activities and increases in impervious cover. Potential effects to biological resources for both listed and nonlisted species will be estimated in this EA based on the number of acres of habitat and/or the number of individual species affected. Impacts to biological resources would be significant if there were substantial adverse effects on protected species or their habitats or if there were any substantial adverse impacts to other sensitive habitats.

4.4.1 No Action

Selecting the no action alternative would result in no ground-disturbing activities and therefore no alteration/disturbance of existing vegetative cover. Due to the absence of ground-disturbing activities at the project areas, vegetation and wildlife, including protected species, would not be significantly impacted.

4.4.2 Proposed Action

Implementing the proposed action would not result in significant impacts to biological resources. The proposed action would remove approximately 1.5 acres of previously disturbed, historically seeded, crested wheatgrass prairie, which is highly prevalent in disturbed areas and is not considered a sensitive community type. Additionally, no listed species (including black-tailed prairie dogs and burrowing owls), or their habitat, have been observed on or adjacent to the project areas. As mentioned previously, in accordance with BAFB policy, surveys would be conducted prior to commencement of construction activities to verify the presence/absence of either black-tailed prairie dogs or burrowing owls. Any black-tailed prairie dogs present would be removed prior to commencing construction activities using approved removal methods. If nesting burrowing owls were present, construction activities would be scheduled between November through February, when nesting owls would not be present. If black-tailed prairie dogs and/or burrowing owls were identified after commencement of construction, construction activities would be halted and the 460 CES/CEVP would be contacted for further instructions.

4.4.3 Alternative 1

Implementing this alternative would result in no significant impact on biological resources. Potential environmental consequences would be similar to those of the proposed action.

4.5 SOCIAL OR ECONOMIC RESOURCES (INCLUDING ENVIRONMENTAL JUSTICE)

Implementing a proposed action or alternative could affect the local demographics, employment, and income potential, as well as localized minority and/or low-income populations. Significant impacts would occur to income and employment if an unacceptable change (i.e., significant loss or decrease) in these components occurs. There would be significant environmental justice impacts if a disproportionate amount of the adverse effects of the action were felt by minority and/or low-income populations.

4.5.1 No Action

Selecting the no action alternative would result in no significant impacts to social or economic resources, including population, income and employment, or housing, in Arapahoe County or within the USCB census tract containing BAFB. Since there would be no construction activities and current methods would continue to be employed, there would be no potential increases in employment opportunities or any reductions in the number of employment opportunities. Since there are no anticipated employment changes due to this alternative, there would be no changes in the population growth rate or demographics, no anticipated change in income potential, and no anticipated change in housing starts.

Arapahoe County would not be considered an area of concentrated minority population, nor would it be considered a poverty area. Likewise, USCB Census Tract 71.02 and Block Group 9 would not be considered areas of concentrated minority population nor would the areas be considered poverty areas. Since there would be no anticipated impacts to population, income and employment, and housing, there would be no anticipated disproportionate impacts to minority or low-income populations.

4.5.2 Proposed Action

Similar to the no action alternative, implementing the proposed action would result in no significant impacts to social or economic resources, including population, income and employment, and housing, within Arapahoe County or within the USCB census tract containing BAFB. Construction activities, if provided by an outside contractor, would be likely to increase short-term spending within the area immediately surrounding BAFB; however, this impact would have likely occurred elsewhere in the region, unless new employment opportunities were created or formerly unemployed workers found employment. No new employment opportunities are anticipated from the operation of

either the H-70 fuel storage facility or the medical pharmacy. Employees would remain at their current on-base facilities (H-70 fuel storage facility staff) or be relocated from off-base facilities to the on-base facilities (medical pharmacy). Additionally, construction spending would be concentrated within the local area, thereby reducing the probability of a change in population growth based on this alternative. Without a change in the population growth rate, housing starts would likely remain static. The only anticipated impacts from implementing the proposed action would be the short-term spending increase for goods and services (food and beverage retailers) within the immediate vicinity of BAFB, which would subside after construction activities have concluded.

Arapahoe County would not be considered an area of concentrated minority population, nor would it be considered a poverty area. Likewise, USCB Census Tract 71.02 and Block Group 9 would not be considered areas of concentrated minority population nor would the areas be considered poverty areas. Since there would be no anticipated long-term impacts to population, income and employment, and housing, there would be no anticipated disproportionate impacts to minority or low-income populations.

4.5.3 Alternative 1

Implementing this alternative would result in no significant impacts on the population, income or employment, or housing characteristics of Arapahoe County or the immediate project areas. Potential environmental consequences would be similar to those of the proposed action.

4.6 LAND USE AND TRANSPORTATION

Potential land use impacts are based upon an area's degree of sensitivity to land use changes. Typically, land use impacts are thought to be significant if they would: (1) violate or otherwise be inconsistent with adopted land use plans or policies; (2) undermine the viability of a favored existing land use activity; (3) create threats to the public health, safety, and welfare of the occupants of adjacent or nearby land users; or (4) conflict with the fundamental mission of an installation.

4.6.1 No Action

Selecting the no action alternative would not create any changes to the transportation networks in and around BAFB. Under this alternative, the existing H-70 fuel storage facility and medical pharmacy would remain at their current location, and no construction activities would occur. The inefficiencies resulting from noncompatible activities in residential areas would prevent optimal land use patterns from fully developing; however, no significant adverse impacts would occur, and baseline conditions would remain as described in Section 3.6.

4.6.2 Proposed Action

Implementation of the proposed action would result in no significant adverse impacts to land use at BAFB; however, slight beneficial impacts can be expected. The operation of the H-70 fuel storage facility and the on-base medical pharmacy would further BAFB's mission and enhance compliance with hazardous materials and wastes collection and disposal plans. Implementation of this alternative would not conflict with the planned land uses described within the BAFB General Plan since the facilities would be appropriately located in designated land uses. Additionally, this alternative would be consistent with AICUZ planning and design guidelines. Since the project areas would be located in the interior of BAFB, there would be no impacts to land uses outside BAFB boundaries.

Implementation of the proposed action would not result in significant impacts to transportation resources. The transport of workers and construction equipment to and from the project areas would result in a temporary increase in traffic volume on Aspen Avenue. Aspen Avenue is a 4-lane primary route, and the temporary increase in traffic is not expected to adversely impact area traffic patterns. There would be no permanent changes to on- or off-base transportation patterns, capacity, or volume. However, there may be temporary negative impacts to transportation from construction activities. During construction activities, there would be a slight increase of traffic on and around the base from trucks entering and leaving the project areas.

4.6.3 Alternative 1

Implementing this alternative would have no significant land use or transportation impacts. Potential environmental consequences would be similar to those of the proposed action.

4.7 PUBLIC SERVICES AND UTILITIES

4.7.1 No Action

Selecting the no action alternative would not create any changes to the public services or utilities in and around BAFB. There would be no construction of new facilities and no increase in demand for utilities, such as energy or water services. Under this alternative, the existing H-70 fuel storage facility and medical pharmacy would remain at their current location, and no construction activities would occur. As a result, no significant adverse impacts would occur, and baseline conditions would remain as described in Section 3.7.

4.7.2 Proposed Action

Implementing the proposed action would not result in significant impacts to public services or utilities. The proposed action would likely result in small additional demands

on municipal public services and a slight increase in demand for utilities. However, the increased utility demand would not be substantial and should be within the existing capacity of the provider. Additionally, operation of the new facilities would not increase the need for local services, such as police, fire, public schools, or public recreational areas.

4.7.3 Alternative 1

Implementing this alternative would have no significant public service or utilities impacts. Potential environmental consequences would be similar to those of the proposed action.

4.8 HAZARDOUS MATERIALS AND SUBSTANCES

Implementing a proposed action or alternative could disturb and/or generate hazardous wastes, consume hazardous materials, and/or disturb known hazardous materials facilities listed on federal and state databases or ERP sites. Potential effects associated with hazardous materials will be determined by the absence/presence of listed facilities within standard search radii and the hazardous waste management requirements associated with construction activities.

4.8.1 No Action

Selecting the no action alternative would result in no ground-disturbing activities and no construction activities; therefore, there would be no alteration or disturbance of soils, no increase in the potential for radon gas emissions, no disturbance of potential subsurface ACM, and no generation of wastes as the result of construction. Conditions would remain as described in Section 3.8. However, this alternative would result in an increased chance and probability of a spill occurring during transport of H-70 fuel containers, if the current system and facilities are used with no improvements. Currently, H-70 fuel containers are located in Building 310, south of the intersection of Telluride Street and A-basin Avenue, approximately 6,400 feet from the airfield. This location and distance from the H-70 fuel canister source (F-16s) increases the chance of ruptures and leakages during canister transport.

4.8.2 Proposed Action

4.8.2.1 Hazardous Materials and Hazardous Wastes

Implementation of the proposed action would result in no significant adverse impacts to hazardous materials and substances used or generated at BAFB. The proposed H-70 fuel storage facility would be strategically situated and have adequate storage space for twelve 6.7-gallon H-70 fuel containers and limited repair facilities to prepare containers for shipping. As per safety regulations, this facility would not be equipped for permanent

personnel office spaces. The proposed medical pharmacy would follow all applicable rules and regulations for handling and disposing of hazardous materials and hazardous wastes.

As discussed in Section 3.8, a search of available environmental records indicated several mapped sites present at BAFB. Two CERCLA Information System SQG sites were listed outside BAFB boundaries and had no violations. The listings for BAFB (1) occurred along the northern boundary and would not be likely to have affected the project areas; (2) the leaking AST was a singular accident, was cleaned, and the case closed; and (3) additional listings are probably the result of the 10 ERP sites (see Table 3-7). The closest ERP sites to the project area for the proposed H-70 fuel storage facility are ERP Site 4-Former Fire Training Area No. 3, ERP Site 6-Airfield Parking Apron and Drainage Ditch to the South of the Apron (Building 801), and ERP Site 9-Underground Storage Tank Burial Site adjacent to Building 903. The closest ERP site to the project area for the proposed medical pharmacy is ERP Site 7-Former Sewage Treatment Plant north of 6th Avenue. As per BAFB policy, construction of new facilities would not occur over ERP sites, but the sites would be remediated.

Hazardous materials utilized during construction activities would likely include fuels, paints, glues, asphalt materials, etc. Most of these materials would typically be consumed in their entirety and very little waste generated for disposal. As a result, no significant amounts of construction-related hazardous materials would be expected, and any hazardous materials generated during the activities would be disposed of in accordance with all applicable federal, state, and local regulations.

Operations at the new facilities are anticipated to be similar to that of the existing facilities with the exception that the H-70 fuel storage facility would comply more fully with safety regulations by its new location adjacent to the airfield. If any leakages of H-70 fuel greater than one pound occur, the USEPA and CDPHE would be notified per EPCRA and CERCLA regulations. As a result, there would be no substantial additional types or quantities of hazardous materials/wastes created or utilized.

4.8.2.2 Asbestos

Implementation of the proposed action would not result in any significant impacts to subsurface ACM. Surveying of subsurface piping would be performed prior to construction to identify areas that could contain subsurface ACM. If any pipes were located, removal and disposal of ACM would be conducted in accordance with applicable regulations to protect human health and the environment. In addition, if necessary, soil sampling would be conducted to determine the presence/absence of ACMs and other hazardous substances.

4.8.2.3 Radon

If long-term radon testing shows results at 4.0 pCi/l or higher, remedial actions should be started to avoid or minimize the presence of radon. A variety of methods are used to

reduce radon in a building. Sealing cracks in floors, simple systems using pipes and fans, or other system designs may be used. In addition, construction designs for new buildings that minimize radon levels should include:

- minimal pathways for soil gas to enter;
- a neutral pressure differential between indoors and outdoors; and
- prevention techniques such as use of gravel in sub-floor area, perforated drain pipes, and insertion of standpipes in sub-slab aggregate with venting to roof.

4.8.3 Alternative 1

Implementing this alternative would have no significant hazardous materials impacts. Potential environmental consequences would be similar to those of the proposed action. The closest ERP sites to the project areas would be ERP Site 4 and ERP Site 6.

Implementation of this alternative would not result in any significant impacts to subsurface ACM since there were no War World II-era structures previously within the project areas. The project areas are on previously disturbed land with no former structures having occupied the site; therefore, asbestos is not expected to be present. If any pipes were found, removal and disposal of ACM would be conducted in accordance with applicable regulations to protect human health and the environment.

4.9 CUMULATIVE IMPACTS

According to the CEQ (1997b) in *Considering Cumulative Effects Under the National Environmental Policy Act*, "...Only by reevaluating and modifying alternatives in light of the project cumulative effects can adverse consequences be effectively avoided or minimized." Cumulative effects should be considered in the scoping process of proposed actions to avoid long-term damage to the natural and man-made environments.

Implementing the proposed action or any of the alternatives considered in this EA could potentially result in cumulative impacts. Cumulative impacts can become an important issue when the chosen activity (i.e., construction of an H-70 fuel storage facility and a medical pharmacy) interacts either directly or indirectly with other unrelated actions (past, present, or reasonably foreseeable). Realignment of BANGB into BAFB created immediate needs for additional built spaces, including the proposed action (see Table 1-2). As mentioned previously, BAFB currently maintains 2.2 million SF of occupiable floor space (BAFB 2002b), which, with the addition of surface parking areas, accounts for approximately 4.2 million SF of developed surface at BAFB. Planned construction/development activities would increase developed surfaces, including parking, at BAFB by approximately 54,250 SF in FY 02, 638,258 SF in FY 03, 59,040 SF in FY 04, and 131,445 SF in FY 05, for an approximate total of 883,000 SF in new construction, depending on construction scheduling, bringing the total developed areas of BAFB to approximately 5.1 million SF (BAFB 2002b). If all projects were constructed

according to current schedules, there would be an increase of approximately 21 percent in developed surfaces on BAFB within the next four years. A full analysis of the cumulative impacts of all construction activities is currently being undertaken by BAFB as part of implementing the General Plan, and therefore only cumulative impacts due to the construction and operation activities of the H-70 fuel storage facility and the medical pharmacy are identified here. The construction of the H-70 fuel storage facility and medical pharmacy would account for 9,641 SF or approximately 1.0 percent of the total planned construction activities between FY 02 and FY 05. These construction activities would increase the amount of impervious and built surfaces within the installation; however, construction and operational BMPs would reduce or avoid any immediate adverse impacts to the natural and man-made environments at BAFB.

4.9.1 Hydrologic Resources

There would be no significant cumulative impacts to hydrologic resources due to implementing the proposed action or alternative. However, there would be more stormwater discharged, collected, and managed due to the increase in impermeable surfaces. Estimated average annual stormwater flows are listed in Table 4-9. Active BMPs, collection, and management of these additional surface waters should minimize any chance for increased discharge concentrations.

Table 4-9
Estimated Average Annual Stormwater Flows for BAFB

Year	Estimated Impervious Surface Area (acres)	Estimated Stormwater Flow* (10 ⁶ gallons)	Groundwater Converted to Collected Stormwater (10 ⁶ gallons)
All Previous Construction	142.6	1.09	0.00
FY 02	143.8	1.10	0.01
FY 03	158.5	1.22	0.13
FY 04	159.9	1.23	0.14
FY 05	162.9	1.25	0.16
Total	162.9	1.25	0.16
PA/A	1.5	0.01	0.01
Percent Accounted for			
by the PA/A	0.9	0.9	0.9

*Assumes average annual precipitation of approximately 16 inches

 $10^6 = 1,000,000$

PA/A = Proposed Action or Alternative

During construction phases, extra care should be taken to perform scheduled servicing of the catch basins, oil-water separators, and any other stormwater collection points. This would ensure containment of construction debris, displaced silt and fuel, oil, grease, and coolants from construction equipment. After construction completion, the subsequent collection and management of stormwater would lead to a lowered transport and discharge of many potential water contaminants, including fertilizers, pesticides, fuel, oil, grease, and coolant.

When implementation of a proposed action or alternative is combined with previous and other foreseeable future activities, flooding potential could be increased. Estimated peak

stormwater flow rates for a 10-, 25-, 50-, and 100-year storm event with duration of 2 and 24 hours are listed in Table 4-10. If necessary, appropriate upgrades to existing stormwater management systems would be made to handle the increased flows. Although there would be no anticipated change to the documented 100- year floodplain, the potential for localized on-base flooding during a significant precipitation event would be examined with respect to these ongoing changes. During such an event, spikes in transport of traditional surface pollutants such as particulates, oil, grease, and coolants could also be observed.

Table 4-10
Peak Stormwater Flows for BAFB during 10-, 25-, 50-, and 100-Year Storm Events

Storm		Peak	F	Peak Stormwater Flow Rates (ft ³ /s)					Percent 2005
Frequenc y (years)	Duration (hrs)	Intensity (in/hr)	Previous	FY 02	FY 03	FY 04	FY 05	PA/A	Peak Flow Due to PA/A
10	2	0.90	79.1	79.7	87.9	88.7	90.3	0.8	0.9
10	24	0.08	7.7	7.8	8.6	8.7	8.8	0.1	0.9
25	2	1.06	98.4	99.2	109.4	110.3	112.4	1.0	0.9
25	24	0.11	9.8	9.9	10.9	11.0	11.2	0.1	0.9
50	2	1.13	105.2	106.1	116.9	117.9	120.2	1.1	0.9
50	24	0.11	10.2	10.2	11.3	11.4	11.6	0.1	0.9
100	2	1.44	133.3	134.4	148.2	149.5	152.3	1.4	0.9
100	24	0.14	13.3	13.4	14.8	14.9	15.2	0.1	0.9

 ft^3/s = cubic feet per second

hrs = hours

in/hr = inches per hour

PA/A = Proposed Action or Alternative

4.9.2 Air Quality

There would be no significant cumulative impacts to air quality due to the proposed action or alternatives. Cumulative impacts to air quality were considered significant if construction or operational emissions for previous, proposed, and reasonably foreseeable future construction activities would exceed the *de minimus* rate specified for attainment/maintenance areas (see Table 4-2), would be regionally significant, would or contribute to a violation of the Title V permit limitations.

4.9.2.1 Construction Activities

The PM_{10} emissions were identified as the primary pollutant from proposed construction activities. The PM_{10} emissions anticipated during construction activities are listed in Table 4-11. These emissions levels do not constitute a significant cumulative impact. The analysis was based on approximate building square footage and surface parking.

Table 4-11 PM₁₀ Emissions for Previous, Proposed, and Reasonably Foreseeable Construction Activities

	All Previous Construction	FY 02	FY 03	FY 04	FY 05	Total
Baseline PM ₁₀ Emissions (tons)	NA	12.0	12.0	12.0	12.0	
PM ₁₀ Emissions from PA/A (tons)	NA	0.0	1.1	0.0	2.2	3.3
Other Reasonably Foreseeable Construction PM ₁₀ Emissions (tons)	NA	4.5	52.5	4.9	10.3	
Total (tons)	513.4	16.4	64.8	16.8	22.8	634.3
Title V Permit Limits for Potential PM ₁₀ Emissions (tons)	NA	99.9	99.9	99.9	99.9	
Percent Emissions Accounted	0.0	0.0	1.7	0.0	0.6	0.5
for by the PA/A	0.0	0.0	1.7	0.0	9.6	0.5

NA = not applicable

PA/A = Proposed Action or Alternative

4.9.2.2 Facilities Operations

There would be minor ongoing emissions from support services after completion of construction activities. These cumulative emissions are not considered significant. Emissions are not anticipated to exceed the rates specified for attainment/maintenance areas for CO, O₃, and PM₁₀, be regionally significant, or significantly contribute to a violation of Title V permit limitations (Table 4-12). The analysis was based on approximate building square footage and surface parking.

Table 4-12
Emissions for Previous, Proposed, and
Reasonably Foreseeable Heating and Cooling Activities

Year	Acres	Estimated Basewide Natural Gas Usage for Heating and Cooling (10 ⁶ ft ³)	CO (tpy)	NO _x (tpy)	PM ₁₀ (tpy)	SO _x (tpy)
All previous construction	142.600	199.800				
FY 02	143.800	201.600	8.3000	10.1000	0.8000	0.10000
FY 03	158.500	222.200	9.2000	11.1000	0.8000	0.10000
FY 04	159.900	224.100	9.2000	11.2000	0.9000	0.10000
FY 05	162.900	228.300	9.4000	11.4000	0.9000	0.10000
PA/A	1.500	0.165	0.0033	0.0077	0.0006	0.00005
Total	162.900	1,075.900	36.1000	43.7000	3.3000	0.30000
PA/A as a Percentage of 5-						
Year Cumulative Emissions	0.921	0.014	0.0090	0.0180	0.0180	0.01900

 $10^6 = 1,000,000$

 ft^3 = cubic feet

tpy = tons per year

PA/A = Proposed Action or Alternative

Construction activities would increase the amount of short-term mobile emissions on BAFB; however, active monitoring and maintenance of construction equipment would

reduce overall impacts during construction. Operational emissions should be minor and not add significantly to BAFB total yearly emissions.

4.9.3 **Noise**

Construction activities associated with a proposed action or alternative would increase the short-term noise levels of the adjacent areas; however, once construction equipment is removed, noise should return to pre-construction levels, which were at or below acceptable limits within the designated noise contours. Operational activities would not contribute to additional long-term noise levels since there would not be any new mobile sources of noise, nor would the activities create additional noise.

4.9.4 Biological Resources

Construction and operational activities associated with the proposed action or alternative would remove approximately 1.5 acres of currently disturbed, undeveloped vegetation, which is less than 1.0 percent of the total undeveloped surface on BAFB. There are currently no protected species or species of local concern (i.e., black-tailed prairie dogs or burrowing owls) located within the project areas, and therefore development associated with the proposed action or alternative would not, in the short-term, cumulatively impact these populations on BAFB. Protected species and species of local concern would be managed under the guidance of the Prairie Dog Management Plan for BAFB and the Wildlife Management Plan for BAFB to ensure that future development would not cumulatively impact these populations on BAFB.

4.9.5 Social or Economic Resources (Including Environmental Justice)

There would be no cumulative social or economic impacts due to the proposed action or alternatives since there would not be an increase or decrease in total employment at BAFB

4.9.6 Land Use and Transportation

Under the proposed action or alternatives, all activities would occur within the appropriate land use area, thereby not creating cumulative impacts to land use on BAFB. Since these activities would be located within the interior of the installation, there should be no adverse short-term impacts to current or planned land use activities on non-military lands surrounding BAFB. The General Plan was developed in coordination with surrounding communities to lessen future impacts that developments at BAFB could potential create. Future developments on BAFB would occur within the appropriate land use category as described in the General Plan, which would coincide with planned land uses of adjacent non-military lands and thereby avoid cumulative impacts to land use and transportation.

4.9.7 Public Services and Infrastructure

Since implementing either the proposed action or alternatives would use existing public services and utilities, there would be a slight increase in demand for these services. However, due to the small demand these activities would require, there would be no short-term adverse changes in the level of service (Table 4-13). Future development at BAFB could cumulatively increase utility demand by approximately 40 percent over the current usage based on the estimated square footage built per year.

Table 4-13
Estimated Increase in Utility Demand

Parameter	Current	FY 02	FY 03	FY 04	FY 05	PA/A
SF	2,200,000	54,250	638,258	59,040	131,445	5,074
Electricity (kwh/m ¹)	8,862,732	218,547	2,571,232	237,843	529,528	20,441
Gas (ft^3/m^2)	156,412	3,857	45,378	4,198	9,345	361
Water (mgm ³)	5.95	0.15	1.72	0.16	0.36	0.01
Cumulative Percent I	ncrease in	2.00	31.00	34.00	40.00	0.20
Utility Demai	nd					

PA/A = Proposed Action or Alternative

kwh/m = kilowatt hour per month

 $ft^3/m = cubic feet per month$

mgm = million gallons per month

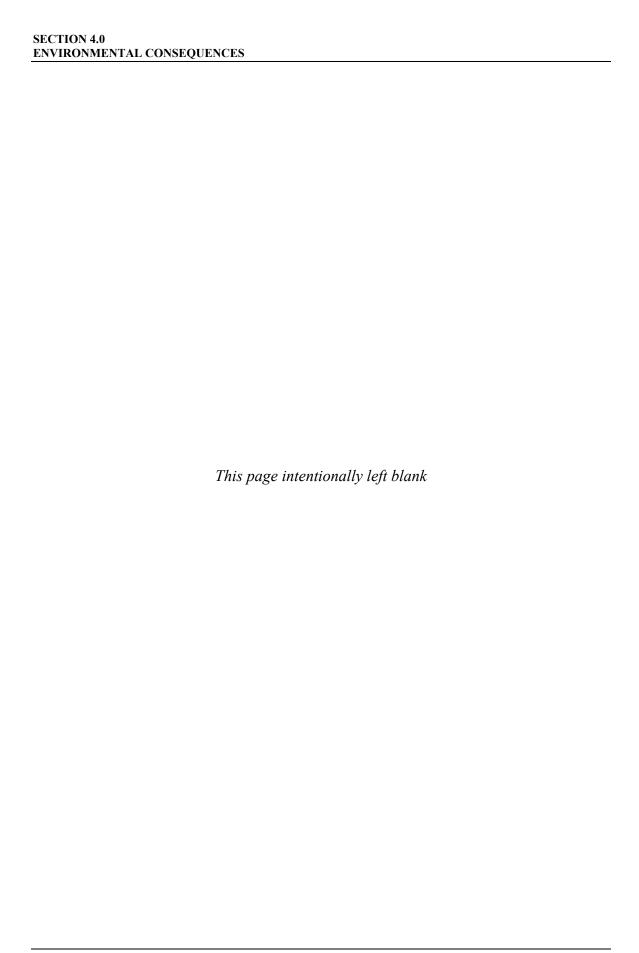
4.9.8 Hazardous Materials and Substances

Following all federal, state, and local laws and regulations, all new materials used for construction would not contain ACM, and if any ACM, were found during the demolition of the current H-70 fuel storage facility (Building 310), it would be disposed of following all applicable regulations, thereby ensuring no cumulative impacts. All hazardous materials and hazardous wastes used or generated during the proposed action or alternatives would be used and disposed of according to all applicable regulations, thereby ensuring no cumulative impacts. Local landfills would have the capacity to accept debris and wastes generated at BAFB.

Average electricity usage per square foot = 4.03 kilowatt hour based on FY 02 utility usage at BAFB

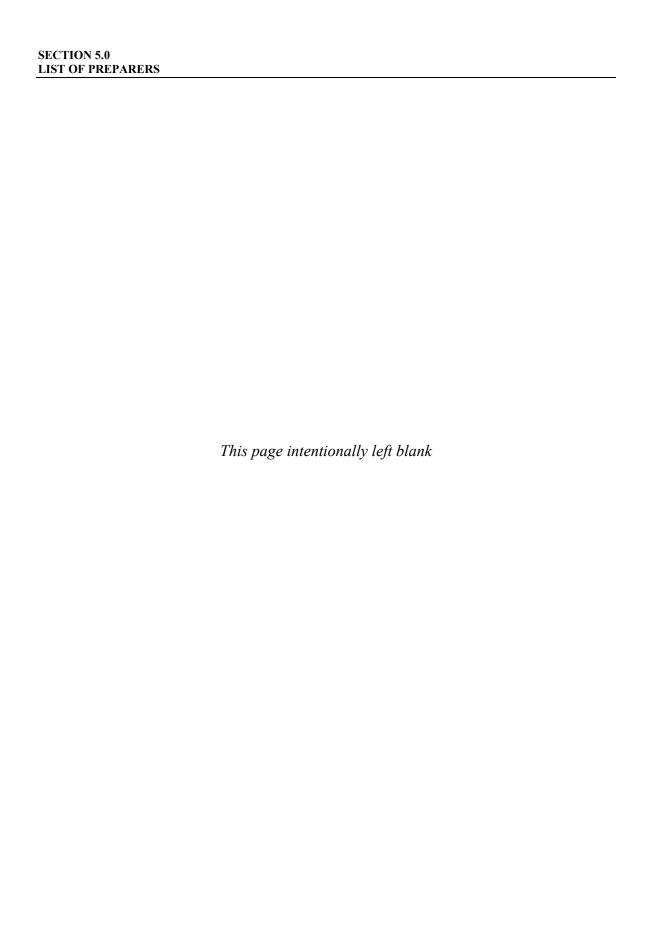
Average gas usage per square foot = 0.07 cubic feet based on FY 02 utility usage at BAFB

³ Average water usage per square foot = 9.01E-08 million gallons per day based on FY 02 utility usage at BAFB



SECTION 5.0 LIST OF PREPARERS

Name/Title	Expertise/Experience	Involvement
Dana Banwart, Geo-Marine, Inc. Air Quality Analyst	Environmental Science 3 years	Air Quality
Chris Clark, Geo-Marine, Inc. NEPA Specialist	NEPA Studies 4 years	Transportation and Public Services and Infrastructure
Donna DeYoung, Geo-Marine, Inc. Hazardous Materials Specialist	Hazardous Materials 3 years	Hazardous Materials
Melissa Green, Geo-Marine, Inc. Principal Investigator	Anthropology 20 years	Cultural Resources
Kurt Hellauer, Geo-Marine, Inc. Airspace and Land Use Analyst	Land Use 13 years	Land Use
John Keiffer, Geo-Marine, Inc. Noise Analyst	Acoustics 2 years	Noise
Tim Lavallee, LPES, Inc. Air Quality Specialist	Air Quality 4 years	Air Quality
Ron Moore, Geo-Marine, Inc. NEPA Program Manager	NEPA Studies 10 years	NEPA Review
David Pitts, Geo-Marine, Inc. Biologist	Biology 10 years	Hydrologic Resources Biological Resources
Rae Lynn Schneider, Geo-Marine, Inc. NEPA Project Manager/Economist	NEPA Studies Economic Analysis 4 years	Project Management Purpose and Need Alternatives Social or Economic Resources



SECTION 6.0 DISTRIBUTION LIST AND AGENCIES AND INDIVIDUALS CONTACTED

Aurora Central Library 14949 East Alameda Drive Aurora, Colorado 80012

Lee Carlson, State Supervisor 755 Parfet Street, Suite 361 Lakewood, Colorado 80215

Cynthia Cody, NEPA Unit Chief U.S. Environmental Protection Agency 999 18th Street, Suite 500 Denver, Colorado 80202

Ed LaRock Colorado Department of Public Health and Environment 4300 Cherry Creek Drive, South Denver, Colorado 80246-1530

Georgianna Contiguglia, State Historic Preservation Officer Colorado History Museum 1300 Broadway Denver, Colorado 80203-2137 Denver Public Library, Government Documents Section 10 West 14th Avenue Denver, Colorado 80204

Eliza Moore, Wildlife Manager Colorado Division of Wildlife 6060 South Broadway Denver, Colorado 80216

Denise Balkas, Director of Planning City of Aurora 1470 South Havana Aurora, Colorado 80012

Brad Beckman, Manager Environmental Planning Colorado Department of Transportation 4201 East Arkansas Avenue Denver, Colorado 80222

SECTION 6.0 DISTRIBUTION LIST AND AGENCIES AND INDIVIDUALS CONTACTED				
This page intentionally left blank				

SECTION 7.0 REFERENCES

- Air Pollution Control Division (APCD). 2002. Redesignation Status Report. Colorado Department of Public Health and Safety. http://www.cdphe.state.co.us/ap/down/redesignations.htm. Accessed 11 December.
- American National Standards Institute (ANSI). 1994. Acoustical Terminology. ANSI S1.1-1994.
- Aurora Public School District. 2002. School Information. http://www.aps.k12.co.us. Accessed 05 December.
- Buckley Air Force Base (BAFB). 2001. 2000 Air Emissions Inventory, Buckley Air Force Base, Colorado. Published by URS Corporation. May.
- Buckley Air Force Base (BAFB). 2002a. History of Buckley Air Force Base. http://www.buckley.af.mil. Accessed 11 September.
- Buckley Air Force Base (BAFB). 2002b. General Plan for Buckley Air Force Base, Colorado. Final. November.
- Buckley Air Force Base (BAFB). 2002c. Integrated Natural Resources Management Plan. Final Draft. November.
- Buckley Air National Guard Base (BANGB). 1999. Integrated Natural Resources Management Plan. Colorado Air National Guard. Aurora, Colorado.
- Buckley Air National Guard Base (BANGB). 2000. Integrated Cultural Resources Management Plan. Draft Final. Published by Foothill Engineering. November.
- Bureau of Economic Analysis (BEA). 2002a. CA05-Personal Income by Major Source and Earnings by Industry-Arapahoe County, Colorado. Regional Accounts Data. Local Area Personal Income. http://www.bea.doc.gov/bea/regional/reis/action.cfm. Accessed 03 December.
- Bureau of Economic Analysis (BEA). 2002b. CA25-Total Full-Time and Part-Time Employment by Industry-Arapahoe County, Colorado. Regional Accounts Data. Local Area Personal Income. http://www.bea.doc.gov/bea/regional/reis/action.cfm. Accessed 03 December.
- City of Aurora. 2002. Community Information. http://www.ci.aurora.co.us. Accessed 05 December. Aurora, Colorado.
- Colorado Air Quality Control Commission (CAQCC). 2000. Carbon Monoxide Redesignation Request and Maintenance Plan for the Denver Metropolitan Area.

- Colorado Air Quality Control Commission (CAQCC). 2001a. Ozone Redesignation Request and Maintenance Plan for the Denver Metropolitan Area.
- Colorado Air Quality Control Commission (CAQCC). 2001b. PM₁₀ Redesignation Request and Maintenance Plan for the Denver Metropolitan Area.
- Colorado Division of Wildlife (CDOW). 2002a. Colorado Species Occurrence and Abundance Tool: Arapahoe County. Natural Diversity Information Source (NDIS). http://ndis.nrel.colostate.edu/ndis/countyab/speciesplus/sname/ar oc_ab .html. Accessed 03 October.
- Colorado Division of Wildlife (CDOW). 2002b. Colorado Listing of Endangered, Threatened, and Wildlife Species of Concern. http://wildlife.state.co.us/T&E/list.asp. Accessed 03 October.
- Colorado Division of Wildlife (CDOW). 2002c. Colorado Rare Plant Field Guide. Rare Plant Technical Committee. http://ndis.nrel.colostate.edu/ndis/rareplants/masterlist.html. Accessed 03 October.
- Council on Environmental Quality (CEQ). 1993. Incorporating Biodiversity Considerations into Environmental Impact Analysis under the National Environmental Policy Act. January.
- Council on Environmental Quality (CEQ). 1997a. Environmental Justice. Guidance under the National Environmental Policy Act. 10 December.
- Council on Environmental Quality (CEQ). 1997b. Considering Cumulative Effects under the National Environmental Policy Act. January.
- Environmental Data Resources, Inc. (EDR). 2002. Radius Map Search, North and South Buckley Air Force Base, Aurora Colorado. 11 December.
- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. Department of the Army, Waterways Experiment Station, Vicksburg. 100 p.
- Fayette, K., R. Schorr, D. Anderson, and E. Mohr. 2000. Natural Heritage Inventory of Buckley Air National Guard Base, Arapahoe County, Colorado. Prepared by Colorado Natural Heritage Program, Colorado State University, Fort Collins, for The Nature Conservancy, Arlington, Virginia.
- Federal Interagency Committee on Noise (FICON). 1992. Federal Agency Review of Selected Airport Noise Analysis Issues. August.
- Fidell, S., D.S. Barger, and T.J. Schultz. 1991. Updating a Dosage-Effect Relationship for the Prevalence of Annoyance Due to General Transportation Noise. Journal of the Acoustical Society of America 89:221-233. January.

- Hemond, H.F. 1994. Chemical Fate and Transport in the Environment. Academic Press. San Diego.
- Regional Transportation District (RTD). 2002. Local Transportation Route Information. http://www.rtd-denver.com. Accessed 04 December.
- U.S. Air Force (USAF). 1994. Air Force Instruction 32-7040, Air Quality Compliance.
- U.S. Air Force (USAF). 1995. Air Force Instruction 32-7061, The Environmental Impact Analysis Process.
- U.S. Air Force (USAF). 1998. Environmental Assessment for the Construction of a Base Exchange and Commissary Complex, Buckley Air National Guard Base, Colorado. December.
- U.S. Air Force (USAF). 1999. Air Force Handbook 32-7084 AICUZ Program Manager's Guide. Air Force Center for Environmental Excellence, San Antonio.
- U.S. Census Bureau (USCB). 1993. 1990 Census of Population and Housing. Detailed Tables P001, P008, P010, P012, P080A, P117, H001, and H004. http://factfinder.census.gov. Accessed 03 December 2002.
- U.S. Census Bureau (USCB). 1995. Poverty Areas. Statistical Brief. http://www.census.gov/population/socdemo/statbriefs/povarea.html. June. Accessed 25 September 2001.
- U.S. Census Bureau (USCB). 2001. Overview of Race and Hispanic Origin. Census 2000 Brief. C2KBR/01-1. March.
- U.S. Census Bureau (USCB). 2002. 2000 Census of Population and Housing. Demographic Profile. Tables DP-1 DP-4. http://www.factfinder.census.gov. Accessed 19 August.
- U.S. Department of Agriculture (USDA). 1971. *Arapahoe County, Colorado—Soil Survey*. In cooperation with the Colorado Agricultural Experiment Station.
- U.S. Environmental Protection Agency (USEPA). 1972. Report to the President and Congress on Noise. Senate Report No. 92-63. Washington, D.C. February.
- U.S. Environmental Protection Agency (USEPA). 1974. Information of Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. 550/9-74-004. Washington, D.C. 24 p.
- U.S. Environmental Protection Agency (USEPA). 1985. Compilation of Air Pollutant Factors, Volume II: Mobile Sources (AP-42). 4th edition, Ann Arbor. September.

- U.S. Environmental Protection Agency (USEPA). 1991. Nonroad Engine and Vehicle Emission Study.
- U.S. Environmental Protection Agency (USEPA). 1995. Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised. EPA-450/R-92-019.
- U.S. Environmental Protection Agency (USEPA). 2002. National Ambient Air Quality Standards (NAAQS). http://www.epa.gov/airs/criteria.html. Accessed 10 December.
- U.S. Fish and Wildlife Service (USFWS). 2002. Federally Listed and Candidate Species & Their Status in Colorado: Arapahoe County. Received via facsimile from the USFWS Ecological Field Office, Lakewood, Colorado, on 03 October.
- Waier, P.R. 2001. RSMeans Building Cost Construction Data. 59th Edition. RSMeans Construction Publishers and Consultants, Kingston, Massachusetts.
- World Health Organization. 1987. Environmental health criteria 68: Hydrazine. Geneva, Switzerland. pp. 1-89.

SECTION 8.0 ACRONYMS AND ABBREVIATIONS

°C degrees Celsius

μg/m³ micrograms per cubic meter

ABW Air Base Wing

ACM asbestos-containing material

AICUZ Air Installation Compatible Use Zone

a.m. ante meridian

APCD Air Pollution Control Division
AQCR Air Quality Control Region
AST aboveground storage tank
BAFB Buckley Air Force Base

BANGB Buckley Air National Guard Base BEA Bureau of Economic Analysis BMP best management practice

CAA Clean Air Act

CAQCC Colorado Air Quality Control Commission

CDOW Colorado Division of Wildlife

CDPHE Colorado Department of Public Health and the Environment

CEQ Council on Environmental Quality

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CES Civil Engineering Squadron

CEVP Environmental Flight

CFR Code of Federal Regulations
CMU concrete masonry unit
CO carbon monoxide

COANG Colorado Air National Guard

CWA Clean Water Act

dB decibel

dBA A-weighted decibel level
DNL day-night average sound level
EA environmental assessment

EDR Environmental Data Resources, Inc. EIS environmental impact statement

EO Executive Order

EPCRA Emergency Planning and Community Right-to-Know Act

ERP environmental restoration program

ESA Endangered Species Act

FEMA Federal Emergency Management Agency FICON Federal Interagency Committee on Noise

FIRE finance, insurance, and real estate FONSI finding of no significant impact FWPCA Federal Water Pollution Control Act

FY fiscal year

g/m²s grams per square meter per second

SECTION 8.0 ACRONYMS/ABBREVIATIONS

HAP hazardous air pollutant

HVAC heating, ventilation, and air conditioning

LBP lead-based paint

MACT maximum available control technology

MMBTU million British thermal units

MSW municipal solid waste

NAAQS National Ambient Air Quality Standards NEPA National Environmental Policy Act

NESHAP National Emission Standard for Hazardous Air Pollutant

NO_X nitrous oxides NOI notice of intent

NPDES National Pollutant Discharge Elimination System

 O_3 ozone

ODS ozone-depleting substance

OH hydroxyl

OSHA Occupational Safety and Health Administration

Pb lead

PCB polychlorinated biphenyl pCi/l pico-Curies per liter

PL Public Law p.m. post meridian

PM₁₀ particulate matter measuring less than 10 microns in diameter

POL petroleum, oil, and lubricant

RCRA Resource Conservation and Recovery Act

RCRIS Resource Conservation and Recovery Information System

ROI region of influence

RTD Regional Transport District

SARA Superfund Amendments and Reauthorization Act

SBIRS space-based infrared surveillance

SEL sound exposure level

SF square feet

SIP State Implementation Plan

SO₂ sulfur dioxide

SQG small quantity generator

SWPPP Stormwater Pollution Prevention Plan

TSCA Toxic Substances Control Act
TSP total suspended particulate
USACE U.S. Army Corps of Engineers

USAF U.S. Air Force USC U.S. Code

USCB U.S. Census Bureau

USDA U.S. Department of Agriculture

USEPA U.S. Environmental Protection Agency

USFWS U.S. Fish and Wildlife Service UST underground storage tank VOC volatile organic compound

A	PI	PE	N	D	IX	A	•
			1.4	.,			•

USAF FORM 813

APPENDICES				
	This page in	tentionally left b	olank	
	1 0	<i>y y</i>		
FINAL Environmental Assessm	ent			_

Report Control Symbol REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS RCS Cilvy 031017 INSTRUCTIONS: Section I to be completed by Proponent; Sections II and II to be completed by Environmental Planning Function. Continue on Separate Sheets as necessary. Reference appropriate item number(s), **SECTION I - PROPONENT INFORMATION** 1. TO (Environmental Planning Function) 2. FROM (Proponent organization and functional address symbol) 2a. TELEPHONE NO. 460 CES/CEVP 460 CES/CEC 7-9902 3. TITLE OF PROPOSED ACTION Replace Hydrazine Facility 4. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need date). Purpose: Store hydrazine safely in a compatible land use zone. Need: Current building is located in an incompatible land use area. It is also located far from the flight line; therefore, increasing potential for spills. 5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES (DOPPA) (Provide sufficient details for evaluation of the total action) See attached 6. PROPONENT APPROVAL (Name and Grade) 6a. SIGNATURE 6b. DATE Tom Slattery 29 lan 03 SECTIONII - PRELIMINARY ENVIRONMENTAL SURVEY. (Check appropriate box and describe potential environmental effects cumulative effects.) (+ = positive effect; 0 = no effect; - = adverse effect; U = Unknown effect. 7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.) Х 8. AIR QUALITY (emissions, attainment status, state implementation plan, etc.) Fugitive dust during construction Х Х 9. WATER RESOURCES (Quality, quantity, source, etc.) Stormwater runoff during and after construction 10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity-distance, etc.) Х Х 11. HAZARDOUS MATERIALS/WASTE (Use/storage/generation, solid waste, etc.)) 12 BIOLOGICAL RESOURCES (Wetlands/floodplains, flora, fauna, etc) Potential prairie dogs and burrowing owls Х Х 13.CULTURAL RESOURCES (Native American burial sites, archeological, historical, etc.) Х 14.GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.) Х 15.SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.) 16.OTHER (Potential impacts not addressed above.) SECTION III - ENVIRONMENTAL ANALSIS DETERMINATION 17. PROPOSED ACTION CUALIFIES FOR A CATEGORICAL EXCLUSION (CATEX#) : OR PROPOSED ACTION DOES NOT QULIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALSIS IS REQUIRED. 18. REMARKS An environmental assessment is required. 19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION 19b, DATE (Name and Grade) Elise Sherva, GS-12

AF FORM 813 - CONTINUATION

PROPOSED ACTION – Construct a new hydrazine (H-70) storage building and demolish the existing building (Bldg 310). The building would be approximately 550 sq ft single-story structure with sufficient space to store approximately 12 H-70 fuel containers. The building would contain internal secondary containment for spills, and subsequent neutralization of the spilled material. Spilled/neutralized material would be disposed of as a hazardous waste (listed). The proposed action also includes the demolition of the existing structure.

ALTERNATIVE ACTION A: Same as proposed action, but near the Hush house. This was eliminated due to the current lack of infrastructure. Also, this site was not as close to the flight line where the canisters are removed and replaced on the aircraft.

ALTERNATIVE ACTION B: Same as the proposed action, but near the existing Munitions complex/traffic control tower. This site was eliminated due to current lack of infrastructure and it's distance from the flight line where the canisters are removed and replaced on the aircraft. This site also involved transporting the canisters across the active runway/taxiway.

NO ACTION ALTERNATIVE. The hydrazine building would remain in its current locations. The potential for accidents would remain the same. The potential for impacting human health and safety would increase once the area was developed, due to the increase in traffic and personnel living, visiting, and working in the area.

REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS

Report Control Symbol RCS: GRWU 0 20044

INSTRUCTIONS: Section I to be completed by Proponent; Sections II and II to be completed by Environmental Planning Function. Continue on Separate Sheets as necessary Reference appropriate item number(s).

Separate Sheets as necessary. Reference appropriate item number(s).							
SECTION I - PROPONENT INFORMATION							
1. TO (Environmental Planning Function) 2. FROM (Proponent organization and functional address symbol) 460 CES/CEV 2a. TELEPH 460 MDS/SGA 303 677							
3. TITLE OF PROPOSED ACTION Construct a Pharmacy	· · · · · · · · · · · · · · · · · · ·						
obtain. Need: Current pharmacy size only allow	eligible beneficiaries with low cost prescriptions that a vs for services to active duty members.	are cor	nvent	to	· voord		
5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES (See attached	DOPPA) (Provide sufficient details for evaluation of the total action.						
6. PROPONENT APPROVAL (Name and Grade)	6a. SIGNATURE	6b. D	ATE	·			
RICHARD J. REISER, Maj, USAF, MSC	The face	21	151	03			
SECTIONII - PRELIMINARY ENVIRONMENTAL SURVEY. (Check cumulative effects.) (+ = positive effect; $0 = no$ effect; - = adverse effects.)	appropriate box and describe potential environmental effects including ect; U = Unknown effect.	+	o	-	υ		
7. AIR INSTALLATION COMPATIBLE USE ZOMERAND USE (Nois	se, accident potential, encroachment, etc.)	T	x				
8. AIR QUALITY (emissions, attainment status, state implementation	plan, etc.) Fugitive dust during construction			х			
9. WATER RESOURCES (Quality, quantity, source, etc.) Stormwater during and after construction							
10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity-distance, etc.)					***************************************		
11. HAZARDOUS MATERIALS/WASTE (Use/storage/generation, solid waste, etc))							
12. BIOLOGICAL RESOURCES (Wetlands/floodplains, flora, fauna,	etc)		х				
13.CULTURAL RESOURCES (Native American burial sites, archeological stress of the stres	ogical, historical, etc.)		x				
14.GEOLOGY AND SOILS (Topography, minerals, geothermal, insta	allation Restoration Program, seismicity, etc.)		x				
15.SOCIOECONOMIC (Employment/population projections, school a	and local fiscal impacts, etc.)		x				
16.OTHER (Potential impacts not addressed above.) Potential a	sbestos contaminated soil a the proposed site				х		
SECTION III - ENVIRONMENTAL ANALSIS DETERMINATION					- 1		
17. PROPOSED ACTION CUALIFIES FOR A CATEGORIC X PROPOSED ACTION DOES NOT QULIFY FOR A CAT	AL EXCLUSION (CATEX#) : OR EX; FURTHER ENVIRONMENTAL ANALSIS IS REQUIRED.			<u>.</u>			
18. REMARKS				_			
19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION	19a. SIGNATURE	19b	DATE				
(Name and Grade) Elise Sherva, GS-12			-				
	liseShine	2	128	103			

AF Form 813 Continuation

Project Title: Pharmacy

Proposed Action: Construct a 5,000 to 6,000 square foot stand-alone pharmacy that would lie to the south of the existing BX/Commissary complex. This would encourage retirees and family members to use the facility since when they use the BX/Commissary. The potential exists for asbestos in the soil due to past building demolition practices.

Alternative 1: Same as the proposed action, but connect the existing BX/Commissary, where an additional for a pick up window would be constructed inside the BX/Commissary. This would be more convenient for patients to pick up and drop off prescriptions.

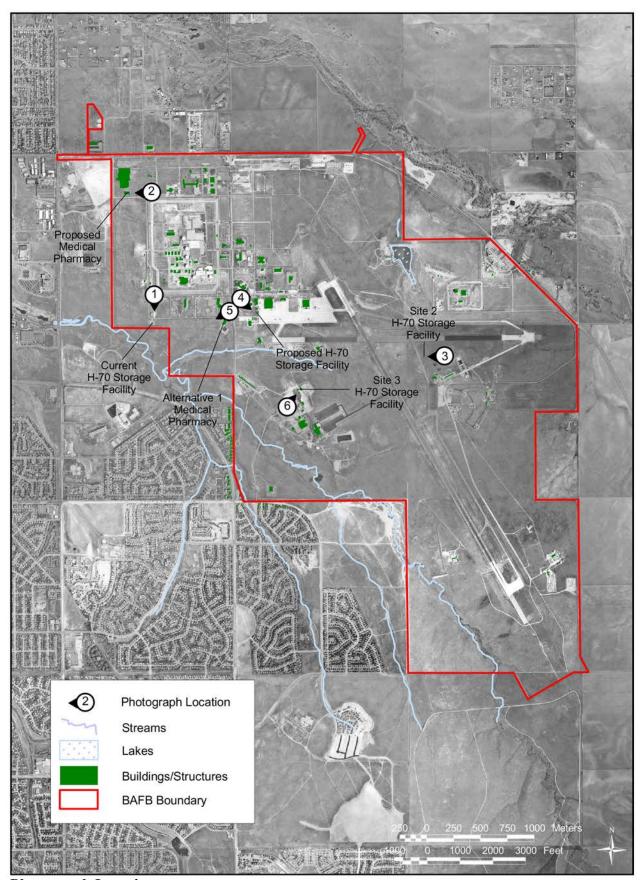
Alternative 2: Lease off-base space to provide pharmacy services. This is not considered a valid long-term solution due to the added costs of leasing, where the cost of leasing for 10 years would equal the cost of constructing a new pharmacy.

Alternative 3: Construct as an addition to the existing Clinic.

No Action Alternative: A Pharmacy wouldn't be constructed and active duty and retirees would continue to receive their prescriptions off base. This is inconvenient for active duty members and would result in increased overall costs for prescriptions.

PHOTOGRAPH LOCATION MAP AND LOG

APPENDICES		
	This page intentionally left blank	
FINAL Environmental Assessmen	nt	



Photograph Locations



Photograph 1: Existing H-70 Facility (Bldg 310) – taken from A-Basin and looking south



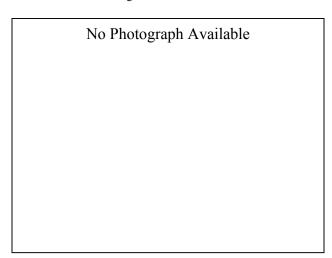
Photograph 3: Alternate H-70 Facility (Site 2)— taken from Bldg 1607 and looking northwest.



Photograph 5: Alternative 1 (Medical Pharmacy- Bldg. 600)—taken from A-Basin St. and looking southwest.



Photograph 2: Proposed Action (Medical Pharmacy)—taken from center of Commissary parking lot and looking southeast.



Photograph 4: Proposed Action (H-70 Facility) – taken from Bldg 700 Parking lot and looking east.



Photograph 6: Alternate H-70 Facility (Site 3)– taken from Bldg 1003 and looking northeast toward Bldg 1001.

APPENDIX C:

BAFB BLACK-TAILED PRAIRIE DOG/BURROWING OWL CONSTRAINTS ON CONSTRUCTION PROJECTS

APPENDICES				
	This page i	intentionally l	eft blank	
FINAL Environmental Assessn	nent			

Black-Tailed Prairie Dog/Burrowing Owl Constraints on Construction Projects

The black-tailed prairie dog is a candidate for listing under the federal Endangered Species Act (PL 93-205). Therefore we are mandated to protect them where possible. An Environmental Assessment (EA) was completed for prairie dog management on Buckley Air Force Base in accordance NEPA and integrated natural resources management planning under the Sikes Act Amendment Act (PL 90-465), and their removal has been approved under certain circumstances. The following considerations must be adhered to and programmed into construction projects:

- Prairie dogs must be removed prior to commencing construction.
- Fumigation is only allowed as a last resort and if covered in an applicable environmental assessment.
- Approved removal methods include soap and water capture, trapping, and Dog Gone (commercial vacuum method).
- Prairie dogs should not be disturbed during the period when the young are in the nest and still nursing (March through May).
- The best time for removal is July through October.

The burrowing owl is listed in Colorado as a state threatened species. In addition, they are a migratory species and must be protected under both categories. They are often found living in prairie dog towns utilizing burrows the prairie dogs have abandoned. They may also share burrows with the prairie dog. Unlike the prairie dogs they cannot be moved and must not be disturbed during nesting. The following considerations must be adhered to and programmed into construction projects:

- The burrowing owl cannot be disturbed or harassed during nesting (late March through July).
- The owl starts to arrive in late February and remains until the end of October. If construction is started during this period, a survey must be completed prior to start to ensure no owls are present. If they are found, construction will be delayed until the owl leaves.
- Construction should start and all potential nesting burrows should be removed before the bird arrives in the spring.
- Owl surveys can be accomplished by the Base Natural Resources Manager.
- The best time to start construction in areas with owls, provided the prairie dogs have been removed, is November through February.

During construction, all prairie dogs should have been removed prior to any earthmoving activities. After construction has begun, if any of the following incidents occur, the contractor should notify the Contracting Officer who should in-turn notify the 460 Civil Engineering Squadron (CES)/ Environmental Management Flight (CEVP):

- Prairie dogs are found on the site where earth moving/trenching activities are going to occur.
- Burrowing owls are observed within 150 feet of construction activities.

• Nests or nesting birds of any kind are observed on the construction site where they may be damaged or destroyed during construction (Migratory Bird Treaty Act).

The Environmental Management Flight will respond to the incident and advise on the best course of action and if necessary request a Depredation Permit from the US Fish and Wildlife Service.

Δ	PI	PE	N	N	Y	D	
		עו	171	.,	_	.,	

EDR RADIUS SEARCH

APPENDICES				
	This page in	tentionally left b	olank	
	1 0	<i>y y</i>		
FINAL Environmental Assessm	ent			_



The EDR Radius Map with GeoCheck®

North Buckley AFB Steamboat Ave Aurora, CO 80011

Inquiry Number: 896033.1s

December 11, 2002

The Source For Environmental Risk Management Data

3530 Post Road Southport, Connecticut 06890

Nationwide Customer Service

Telephone: 1-800-352-0050 Fax: 1-800-231-6802 Internet: www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map.	. 2
Detail Map.	3
Map Findings Summary	 4
Map Findings.	6
Orphan Summary	
Government Records Searched/Data Currency Tracking.	GR-1
GEOCHECK ADDENDUM	
Physical Setting Source Addendum.	A-1
Physical Setting Source Summary.	A-2
Physical Setting Source Map.	A-7
Physical Setting Source Map Findings	A-8
Physical Setting Source Records Searched	A-67

Thank you for your business.Please contact EDR at 1-800-352-0050 with any questions or comments.

Disclaimer Copyright and Trademark Notice

This report contains information obtained from a variety of public and other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL EDR BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES.

Entire contents copyright 2001 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and the edr logos are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

TARGET PROPERTY INFORMATION

ADDRESS

STEAMBOAT AVE AURORA, CO 80011

COORDINATES

Latitude (North): 39.722100 - 39° 43' 19.6" Longitude (West): 104.787500 - 104° 47' 15.0"

Universal Tranverse Mercator: Zone 13 UTM X (Meters): 518212.8 UTM Y (Meters): 4396726.0

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property: 2439104-F7 FITZSIMONS, CO Source: USGS 7.5 min quad index

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

FEDERAL ASTM STANDARD

NPL...... National Priority List

Proposed NPL..... Proposed National Priority List Sites

System

CERCLIS No Further Remedial Action Planned

CORRACTS..... Corrective Action Report

ERNS..... Emergency Response Notification System

STATE ASTM STANDARD

SWF/LF..... Solid Waste Sites & Facilities

LUST..... Leaking Underground Storage Tank List

CO TRUST Lust Trust Sites

UST...... Underground Storage Tank Database

INDIAN UST..... Underground Storage Tanks on Indian Land

VCP......Voluntary Cleanup & Redevelopment Act Application Tracking Report

FEDERAL ASTM SUPPLEMENTAL

CONSENT..... Superfund (CERCLA) Consent Decrees

ROD...... Records Of Decision

Delisted NPL..... National Priority List Deletions

FINDS...... Facility Index System/Facility Identification Initiative Program Summary Report

HMIRS Hazardous Materials Information Reporting System

MLTS..... Material Licensing Tracking System

MINES...... Mines Master Index File
NPL Liens..... Federal Superfund Liens
PADS....... PCB Activity Database System

FTTS______FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, &

Rodenticide Act)/TSCA (Toxic Substances Control Act)

STATE OR LOCAL ASTM SUPPLEMENTAL

HISTORICAL LANDFILL Historical Landfill List
AST Aboveground Tank List

CO ERNS...... Spills Database

METHANE SITE..... Methane Site Investigations - Jefferson County 1980

Methane Investigation...... Methane Gas & Swamp Findings

EDR PROPRIETARY HISTORICAL DATABASES

Coal Gas Former Manufactured Gas (Coal Gas) Sites

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Elevations have been determined from the USGS 1 degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. EDR's definition of a site with an elevation equal to the target property includes a tolerance of +/- 10 feet. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property (by more than 10 feet). Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

FEDERAL ASTM STANDARD

RCRIS: The Resource Conservation and Recovery Act database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act. The source of this database is the U.S. EPA.

A review of the RCRIS-SQG list, as provided by EDR, and dated 09/09/2002 has revealed that there are

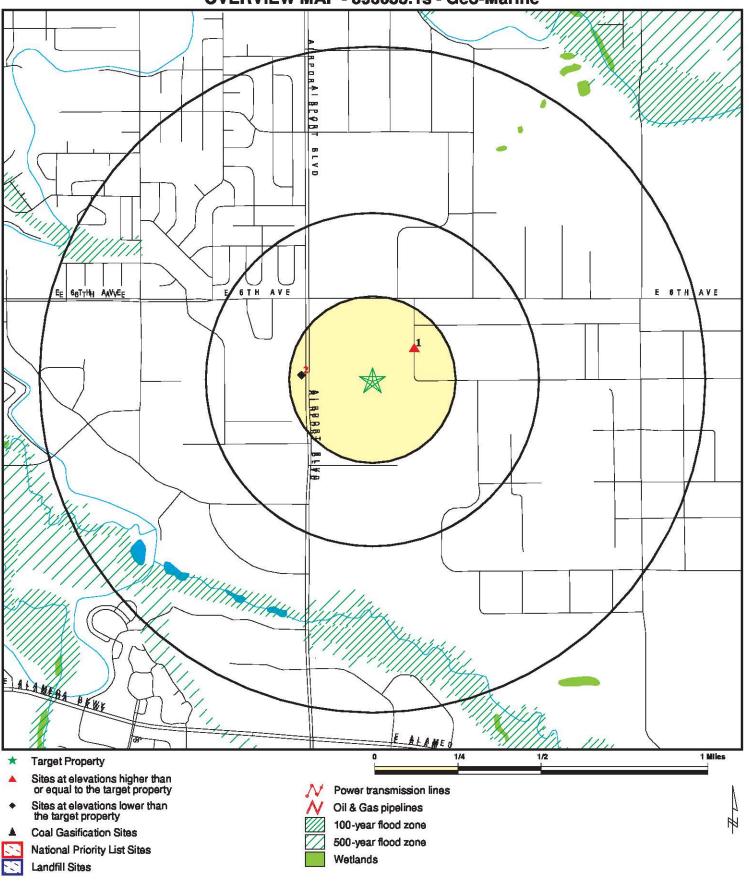
2 RCRIS-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
ALTEC INC	641 N TELLURIDE ST	1/8 - 1/4 N E	1	6
Lower Elevation	Address	Dist / Dir	Map ID	Page
DANS AUTO BODY	509 BUCKLEY ROAD UNIT F	1/8 - 1/4W	2	6

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
BUCKLEY AIR BASE/USDOF	FTTS
BUCKLEY ANG BASE	FTTS
BUCKLEY EAST 6TH AVE SITE	CERCLIS, FINDS
LOWRY COMMUNICATION FACILITY ANNEX	CERCLIS, FINDS
BUCKLEY ANG	LUST
AURORA PUBLIC SCHOOLS TRANSPOR	LUST
AURORA PUBLIC SCHOOLS TRANSPOR	LUST
BUCKLEY AIR NATL GUARD BASE	ERNS
BUCKLEY AFB	ERNS
BUCKLEY AIR NATL GUARD BASE / 340 N BEAVER CREEK ST	ERNS
BUCKLEY ANG BASE	ERNS
BUCKLEY ANG 340 N BEAVER CREEK ST	ERNS
500 BUCKLEY RD./BEHIND 505 NUCLA WAY	ERNS
BUCKLEY AIR FORCE BASE	ERNS
FLT LINE ADJACENT TO BLD 909/BUCKLEY RD	ERNS
GOODYEAR/BUCKLEY & ILIFF (1 BLOCK AWAY)	ERNS
GOODYEAR/BUCKLEY & ILIFF (1 BLOCK AWAY)	ERNS
NATIONAL GUARD BASE NEAR THE DENVER CIVIL AIRPORT BUCKLEY FI	ERNS
ORCHID RD & BUCKLEY RD.	ERNS
PARKER RD. JUST NORTH OF QUINCY	ERNS
QUINCY AND BUCKLEY ROAD	ERNS
QUINCY AND BUCKLEY ROAD	ERNS
QUINCY AND BUCKLEY ROAD	ERNS
TRAILER#177/WOODSHIRE E.TAILER PARK/COLFAX AND BUCKLEY	ERNS
BUCKLEY ANG BASE 140 SPTG/CEV STOP 26 660 S ASPEN ST	ERNS

OVERVIEW MAP - 896033.1s - Geo-Marine

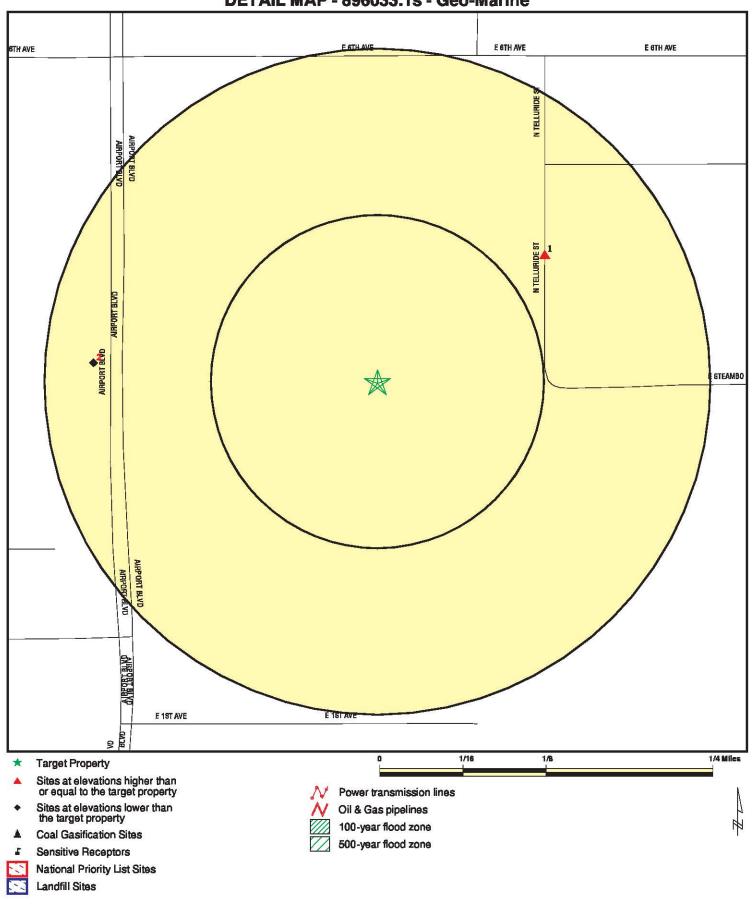


TARGET PROPERTY:
ADDRESS:
CITY/STATE/ZIP:
LAT/LONG:

North Buckley AFB Steamboat Ave Aurora CO 80011 39.7221 / 104.7875 CUSTOMER: Geo-Marine CONTACT: Donna DeYoung INQUIRY#: 896033.1s

DATE: December 11, 2002 1:03 pm

DETAIL MAP - 896033.1s - Geo-Marine



TARGET PROPERTY: ADDRESS: CITY/STATE/ZIP: LAT/LONG: North Buckley AFB Steamboat Ave Aurora CO 80011 39.7221 / 104.7875 CUSTOMER: Geo-Marine CONTACT: Donna De Young INQUIRY #: 896033.1s

INQUIRY #: 896033.1s DATE: December 11, 2002 1:03 pm

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FEDERAL ASTM STANDARI	<u>D</u>							
NPL Proposed NPL CERCLIS CERC-NFRAP CORRACTS RCRIS-TSD RCRIS Lg. Quan. Gen. RCRIS Sm. Quan. Gen. ERNS		1.000 1.000 0.500 0.250 1.000 0.500 0.250 TP	0 0 0 0 0 0 0 0 0 NR	0 0 0 0 0 0 0 2 NR	0 0 0 NR 0 0 NR NR NR	0 0 NR NR 0 NR NR NR	NR NR NR NR NR NR NR	0 0 0 0 0 0 0 2
STATE ASTM STANDARD			.			21/2	N 1/A	
State Haz. Waste State Landfill LUST CO TRUST UST INDIAN UST VCP		N/A 0.500 0.500 0.500 0.250 0.250 0.500	N/A 0 0 0 0 0	N/A 0 0 0 0 0	N/A 0 0 0 NR NR 0	N/A NR NR NR NR NR	N/A NR NR NR NR NR	N/A 0 0 0 0 0
FEDERAL ASTM SUPPLEM	ENTAL							
CONSENT ROD Delisted NPL FINDS HMIRS MLTS MINES NPL Liens PADS RAATS TRIS TSCA SSTS FTTS		1.000 1.000 1.000 TP TP TP 0.250 TP TP TP TP TP TP	0 0 0 NR NR NR 0 NR NR NR NR NR NR NR	0 0 0 NR	0 0 0 NR	0 0 0 NR NR NR NR NR NR NR NR NR	NR NR NR NR NR NR NR NR NR NR NR NR	0 0 0 0 0 0 0 0 0
STATE OR LOCAL ASTM SUPPLEMENTAL								
Historical Landfill AST CO ERNS Methane Site Methane Investigation		0.500 TP TP TP TP	0 NR NR NR NR	0 NR NR NR NR	0 NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	0 0 0 0
EDR PROPRIETARY HISTOI	RICAL DATABA	ASES						
Coal Gas		1.000	0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Search

Target Distance Total

Database Property (Miles) < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Plotted

AQUIFLOW - see EDR Physical Setting Source Addendum

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

N/A = This State does not maintain a SHWS list. See the Federal CERCLIS list.

MAP FINDINGS Map ID

Direction Distance Distance (ft.)

EDR ID Number Elevation Site Database(s) **EPA ID Number**

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

ALTEC INC RCRIS-SQG 1001404433 NE **641 N TELLURIDE ST FINDS** COR000012237

1/8-1/4 834 ft. Higher

RCRIS:

AURORA, CO 80011

Owner: ALTEC INDUSTRIES INC.

(205) 991-7733

EPA ID: COR000012237 **BRIAN BENDA** Contact: (303) 364-9515

Classification: **Small Quantity Generator**

Used Oil Recyc: No

TSDF Activities: Not reported

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:

Facility Registry System (FRS)

Resource Conservation and Recovery Act Information system (RCRAINFO)

DANS AUTO BODY RCRIS-SQG 1000360526 West **509 BUCKLEY ROAD UNIT F** FINDS COD148290455 AURORA, CO 80011

1/8-1/4 1127 ft. Lower

RCRIS:

BUCKLEY SIX PARTNERSHIP Owner:

(999) 999-9999 EPA ID: COD148290455 Contact: **DAN GREGG**

(303) 344-3663

Classification: N, Handler transports wastes, but commercial status is unknown, Small

Quantity Generator

Used Oil Recyc: No

TSDF Activities: Not reported

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:

Facility Registry System (FRS)

Resource Conservation and Recovery Act Information system (RCRAINFO)

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
AURORA	1004445151	BUCKLEY AIR BASE/USDOF	6TH AVE E, BUILDING 801	80011	FTTS
AURORA	S103851358	BUCKLEY ANG	BLDG 407	80011	LUST
AURORA	1005623214	BUCKLEY ANG BASE	BLDG. 1005	80011	FTTS
AURORA	90184508	BUCKLEY AIR NATL GUARD BASE	BUCKLEY AIR NATL GUARD BASE		ERNS
AURORA	89117639	BUCKLEY AFB	BUCKLEY AFB		ERNS
AURORA	94478310	BUCKLEY AIR NATL GUARD BASE / 340 N BEAVER	BUCKLEY AIR NATL GUARD BASE / 340 N	80011	ERNS
ALIDODA	04404574	CREEK ST	BEAVER CREEK ST	00044	EDNO
AURORA	94401574	BUCKLEY AND BASE	BUCKLEY AND BASE		ERNS
AURORA	94376987	BUCKLEY ANG 340 N BEAVER CREEK ST	BUCKLEY ANG 340 N BEAVER CREEK ST		ERNS
AURORA	91238168	500 BUCKLEY RD./BEHIND 505 NUCLA WAY	500 BUCKLEY RD./BEHIND 505 NUCLA WAY		ERNS
AURORA	90165374	BUCKLEY AIR FORCE BASE	BUCKLEY AIR FORCE BASE		ERNS
AURORA	1003073250	BUCKLEY EAST 6TH AVE SITE	BUCKLEY EAST 6TH AVE.		CERCLIS, FINDS LUST
AURORA	S105567696	AURORA PUBLIC SCHOOLS TRANSPOR	90 BUCKLEY RD		LUST
AURORA	S105567697	AURORA PUBLIC SCHOOLS TRANSPOR	90 BUCKLEY RD	80011	
AURORA AURORA	90177131 90478710	FLT LINE ADJACENT TO BLD 909/BUCKLEY RD GOODYEAR/BUCKLEY & ILIFF (1 BLOCK AWAY)	FLT LINE ADJACENT TO BLD 909/BUCKLEY RD GOODYEAR/BUCKLEY & ILIFF (1 BLOCK AWAY)		ERNS ERNS
		,			ERNS
AURORA	90158554	GOODYEAR/BUCKLEY & ILIFF (1 BLOCK AWAY)	GOODYEAR/BUCKLEY & ILIFF (1 BLOCK AWAY)		
AURORA	879824	NATIONAL GUARD BASE NEAR THE DENVER CIVIL AIRPORT BUCKLEY FI	NATIONAL GUARD BASE NEAR THE DENVER CIVIL AIRPORT BUCKLEY FI		ERNS
AURORA	89117696	ORCHID RD & BUCKLEY RD.	ORCHID RD & BUCKLEY RD.		ERNS
AURORA	99632649	PARKER RD. JUST NORTH OF QUINCY	PARKER RD. JUST NORTH OF QUINCY		ERNS
AURORA	96482656	QUINCY AND BUCKLEY ROAD	QUINCY AND BUCKLEY ROAD		ERNS
AURORA	8872229	QUINCY AND BUCKLEY ROAD	QUINCY AND BUCKLEY ROAD		ERNS
AURORA	88482656	QUINCY AND BUCKLEY ROAD	QUINCY AND BUCKLEY ROAD		ERNS
AURORA	96473730	TRAILER#177/WOODSHIRE E.TAILER PARK/COLFAX	TRAILER#177/WOODSHIRE E.TAILER		ERNS
		AND BUCKLEY	PARK/COLFAX AND BUCKLEY		
AURORA	1003862201	LOWRY COMMUNICATION FACILITY ANNEX	TWO MILES EAST OF FORMER LOWRY AFB ON	80011	CERCLIS, FINDS
BUCKLEY ANG BASE	96483329	BUCKLEY ANG BASE 140 SPTG/CEV STOP 26 660 S ASPEN ST	BUCKLEY ANG BASE 140 SPTG/CEV STOP 26 660 S ASPEN ST	80011	ERNS

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement

of the ASTM standard.

FEDERAL ASTM STANDARD RECORDS

NPL: National Priority List

Source: EPA Telephone: N/A

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/24/02 Date Made Active at EDR: 12/09/02

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 11/04/02

Elapsed ASTM days: 35

Date of Last EDR Contact: 11/04/02

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 8

Telephone 215-814-5418 Telephone: 303-312-6774

EPA Region 4

Telephone 404-562-8033

Proposed NPL: Proposed National Priority List Sites

Source: EPA Telephone: N/A

Date of Government Version: 10/24/02 Date of Data Arrival at EDR: 11/04/02

Date Made Active at EDR: 12/09/02 Elapsed ASTM days: 35

Database Release Frequency: Semi-Annually Date of Last EDR Contact: 11/04/02

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

Source: EPA

Telephone: 703-413-0223

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 08/15/02 Date Made Active at EDR: 10/28/02

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 09/23/02

Elapsed ASTM days: 35

Date of Last EDR Contact: 09/23/02

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Source: EPA

Telephone: 703-413-0223

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 09/15/02 Date of Data Arrival at EDR: 10/03/02

Date Made Active at EDR: 10/28/02 Elapsed ASTM days: 25

Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/23/02

CORRACTS: Corrective Action Report

Source: EPA

Telephone: 800-424-9346

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 05/02/02 Date of Data Arrival at EDR: 05/06/02

Date Made Active at EDR: 07/15/02 Elapsed ASTM days: 70

Database Release Frequency: Semi-Annually Date of Last EDR Contact: 09/09/02

RCRIS: Resource Conservation and Recovery Information System

Source: EPA/NTIS Telephone: 800-424-9346

Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate,

transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery

Act (RCRA).

Date of Government Version: 09/09/02 Date of Data Arrival at EDR: 09/24/02

Date Made Active at EDR: 10/28/02 Elapsed ASTM days: 34

Database Release Frequency: Varies Date of Last EDR Contact: 09/24/02

ERNS: Emergency Response Notification System

Source: EPA/NTIS Telephone: 202-260-2342

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous

substances.

Date of Government Version: 12/31/01 Date of Data Arrival at EDR: 07/02/02

Date Made Active at EDR: 07/15/02 Elapsed ASTM days: 13

Database Release Frequency: Varies Date of Last EDR Contact: 10/28/02

FEDERAL ASTM SUPPLEMENTAL RECORDS

BRS: Biennial Reporting System

Source: EPA/NTIS Telephone: 800-424-9346

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG)

and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/99 Date of Last EDR Contact: 09/16/02

Database Release Frequency: Biennially Date of Next Scheduled EDR Contact: 12/16/02

CONSENT: Superfund (CERCLA) Consent Decrees

Source: EPA Regional Offices

Telephone: Varies

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released

periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: N/A

Date of Last EDR Contact: N/A

Database Release Frequency: Varies Date of Next Scheduled EDR Contact: N/A

ROD: Records Of Decision

Source: EPA

Telephone: 703-416-0223

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical

and health information to aid in the cleanup.

Date of Government Version: 12/21/01 Date of Last EDR Contact: 10/07/02

Database Release Frequency: Annually Date of Next Scheduled EDR Contact: 01/06/03

DELISTED NPL: National Priority List Deletions

Source: EPA Telephone: N/A

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the

NPL where no further response is appropriate.

Date of Government Version: 10/18/02 Date of Last EDR Contact: 11/04/02

Database Release Frequency: Quarterly Date of Next Scheduled EDR Contact: 02/03/03

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report

Source: EPA Telephone: N/A

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 10/10/02 Date of Last EDR Contact: 10/07/02

Database Release Frequency: Quarterly Date of Next Scheduled EDR Contact: 01/06/03

HMIRS: Hazardous Materials Information Reporting System

Source: U.S. Department of Transportation

Telephone: 202-366-4555

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 07/31/02 Date of Last EDR Contact: 10/21/02

Database Release Frequency: Annually Date of Next Scheduled EDR Contact: 01/20/03

MLTS: Material Licensing Tracking System Source: Nuclear Regulatory Commission

Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency,

EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/21/02 Date of Last EDR Contact: 10/08/02

Database Release Frequency: Quarterly Date of Next Scheduled EDR Contact: 01/06/03

MINES: Mines Master Index File

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959

Date of Government Version: 09/10/02 Date of Last EDR Contact: 09/30/02

Database Release Frequency: Semi-Annually

Date of Next Scheduled EDR Contact: 12/30/02

NPL LIENS: Federal Superfund Liens

Source: EPA

Telephone: 205-564-4267

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

TC896033.1s Page GR-3

Date of Government Version: 10/15/91 Date of Last EDR Contact: 11/25/02

Database Release Frequency: No Update Planned Date of Next Scheduled EDR Contact: 02/24/03

PADS: PCB Activity Database System

Source: EPA

Telephone: 202-564-3887

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers

of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/28/02 Date of Last EDR Contact: 11/13/02

Database Release Frequency: Annually Date of Next Scheduled EDR Contact: 02/10/03

RAATS: RCRA Administrative Action Tracking System

Source: EPA

Telephone: 202-564-4104

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95 Date of Last EDR Contact: 09/10/02

Database Release Frequency: No Update Planned Date of Next Scheduled EDR Contact: 12/09/02

TRIS: Toxic Chemical Release Inventory System

Source: EPA

Telephone: 202-260-1531

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and

land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/00 Date of Last EDR Contact: 09/24/02

Database Release Frequency: Annually Date of Next Scheduled EDR Contact: 12/23/02

TSCA: Toxic Substances Control Act

Source: EPA

Telephone: 202-260-5521

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant

site.

Date of Government Version: 12/31/98 Date of Last EDR Contact: 09/09/02

Database Release Frequency: Every 4 Years Date of Next Scheduled EDR Contact: 12/09/02

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA

Telephone: 202-564-2501

Date of Government Version: 04/25/02 Date of Last EDR Contact: 09/24/02

Database Release Frequency: Quarterly

Date of Next Scheduled EDR Contact: 12/23/02

SSTS: Section 7 Tracking Systems

Source: EPA

Telephone: 202-564-5008

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices

being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/00 Date of Last EDR Contact: 10/22/02

Database Release Frequency: Annually Date of Next Scheduled EDR Contact: 01/20/03

TC896033.1s Page GR-4

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-564-2501

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA. TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the

Agency on a quarterly basis.

Date of Government Version: 04/25/02 Date of Last EDR Contact: 09/24/02

Date of Next Scheduled EDR Contact: 12/23/02 Database Release Frequency: Quarterly

STATE OF COLORADO ASTM STANDARD RECORDS

SHWS: This state does not maintain a SHWS list. See the Federal CERCLIS list.

Source: EPA

Telephone: 703-413-0223

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: N/A Date Made Active at EDR: N/A

Database Release Frequency: N/A

Date of Data Arrival at EDR: N/A Elapsed ASTM days: N/A

Date of Last EDR Contact: 09/24/02

SWF/LF: Solid Waste Sites & Facilities Source: Department of Health Telephone: 303-692-3450

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 07/22/02 Date Made Active at EDR: 10/11/02 Database Release Frequency: Annually

Date of Data Arrival at EDR: 09/09/02

Elapsed ASTM days: 32

Date of Last EDR Contact: 09/09/02

LUST: Leaking Underground Storage Tank List

Source: Department of Labor and Employment, Oil Inspection Section

Telephone: 303-620-4021

The Leaking Underground Storage Tank List contains sites that have completed cleanup activities. This does not mean that the owner and/or operator has removed all of the contamination, but instead means that the actions taken have met the criteria that the division uses for determining adequate cleanup. It also contains those sites that have either been just identified as having a leak, or are in the process of remediating the contaminant problem but have not yet been closed and therefore the site has not received a final agency determination. Included in this category are those sites that have completed active remediation and are now conducting groundwater monitoring programs. Every effort is made to ensure the accuracy of the data contained in this database, however, the Department of Public Health and Environment does not guarantee that this listing is completely accurate or up-to-date. In the event that site specific data is desired or necessary to ensure accuracy, you are encouraged to contact our Records Center at (303) 692-3331 to arrange a meeting to review the site file(s).

Date of Government Version: 10/07/02 Date Made Active at EDR: 11/05/02

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 10/07/02

Elapsed ASTM days: 29

Date of Last EDR Contact: 10/07/02

TRUST: Lust Trust Sites Source: Department of Health Telephone: 303-620-4016

List of complaint sites where there is no known responsible party. The state is doing investigations on them.

Date of Government Version: 12/07/99 Date Made Active at EDR: 01/06/00

Database Release Frequency: Varies

Date of Data Arrival at EDR: 12/08/99

Elapsed ASTM days: 29

Date of Last EDR Contact: 10/28/02

UST: Underground Storage Tank Database

Source: Department of Labor and Employment, Oil Inspection Section

Telephone: 303-620-4021

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available

information varies by state program.

Date of Government Version: 10/15/02 Date of Data Arrival at EDR: 10/15/02

Date Made Active at EDR: 10/23/02 Elapsed ASTM days: 8

Database Release Frequency: Quarterly Date of Last EDR Contact: 10/11/02

INDIAN UST: Underground Storage Tanks on Indian Land

Source: EPA Region 8 Telephone: 303-312-6137

> Date of Government Version: 10/04/02 Date of Data Arrival at EDR: 10/25/02

Date Made Active at EDR: 12/04/02 Elapsed ASTM days: 40

Database Release Frequency: Varies Date of Last EDR Contact: 10/03/02

VCP: Voluntary Cleanup & Redevelopment Act Application Tracking Report

Source: Department of Public Health and Environment

Telephone: 303-692-3331

The Voluntary Cleanup and Redevelopment Act is intended to permit and encourage voluntary cleanups by providing a method to determine clean-up responsibilities in planning the reuse of property. The VCRA was intended for sites

which were not covered by existing regulatory programs.

Date of Government Version: 08/01/02 Date of Data Arrival at EDR: 09/23/02

Date Made Active at EDR: 10/29/02 Elapsed ASTM days: 36

Database Release Frequency: Semi-Annually Date of Last EDR Contact: 09/23/02

STATE OF COLORADO ASTM SUPPLEMENTAL RECORDS

HISTORICAL LANDFILL: Historical Landfill List

Source: Department of Health Telephone: 303-692-3450 Abandoned/Inactive Landfills.

Date of Government Version: 01/31/93 Date of Last EDR Contact: 09/05/96 Database Release Frequency: No Update Planned Date of Next Scheduled EDR Contact: N/A

AST: Aboveground Tank List

Source: Department of Labor and Employment, Oil Inspection Section

Telephone: 303-620-4021

Registered Aboveground Storage Tanks.

Date of Government Version: 10/15/02 Date of Last EDR Contact: 10/11/02 Date of Next Scheduled EDR Contact: 01/06/03

Database Release Frequency: Semi-Annually

CO ERNS: Spills Database

Source: Department of Public Health and Environmental

Telephone: 303-692-2000

Date of Government Version: 11/04/02 Date of Last EDR Contact: 11/04/02

Date of Next Scheduled EDR Contact: 02/03/03 Database Release Frequency: Quarterly

TC896033.1s Page GR-6

METHANE SITE: Methane Site Investigations - Jefferson County 1980

Source: Jefferson County Health Department

Telephone: 303-239-7175

Date of Government Version: 12/31/80

Date of Last EDR Contact: 01/27/95

Database Release Frequency: No Update Planned

Date of Next Scheduled EDR Contact: N/A

METHANE INVESTIGATION: Methane Gas & Swamp Findings

Source: Department of Health Telephone: 303-640-3335

Date of Government Version: 03/15/79

Date of Last EDR Contact: 01/27/95

Date of Next Scheduled EDR Contact: N/A

Date of Next Scheduled EDR Contact: N/A

LOCAL RECORDS

ADAMS COUNTY:

Summary Report on Methane Gas Hazards and Surveys Conducted on Domestic and Demolition Landfills in Adams County

Source: Tri-County Health Department

Telephone: 303-761-1340

Date of Government Version: 05/08/78

Date of Last EDR Contact: 01/27/95

Date of Next Scheduled EDR Contact: N/A

ARAPAHOE COUNTY:

A Survey of Landfills in Arapahoe County

Source: Tri-County Health Department

Telephone: 303-761-1340

Date of Government Version: 12/31/78

Date of Last EDR Contact: 01/27/95

Date of Next Scheduled EDR Contact: N/A

Date of Next Scheduled EDR Contact: N/A

BOULDER COUNTY:

Old Landfill Sites

Source: Boulder County Health Department

Telephone: 303-441-1182

Date of Government Version: 05/01/86

Date of Last EDR Contact: 01/30/98

Date of Next Scheduled EDR Contact: N/A

DENVER COUNTY:

Landfills in Denver County

Source: City and County of Denver Telephone: 303-436-7300

Date of Government Version: 12/01/94 Date of Last EDR Contact: 12/18/94
Date of Next Scheduled EDR Contact: N/A

DOUGLAS COUNTY:

Douglas County Landfill Key

Source: Tri-County Health Department

Telephone: 303-761-1340

Date of Government Version: 06/12/91 Date of Last EDR Contact: 01/27/95
Database Release Frequency: No Update Planned Date of Next Scheduled EDR Contact: N/A

PUEBLO COUNTY:

Designated Disposal & Landfill Sites

Source: Pueblo City-County Health Department

Telephone: 719-583-4300

Date of Government Version: 04/30/90 Date of Last EDR Contact: 11/13/95
Database Release Frequency: No Update Planned Date of Next Scheduled EDR Contact: N/A

TRI COUNTY:

Tri-County Area Solid Waste Facilities List (Adams, Arapahoe and Douglas Counties)

Source: Tri-County Health Department

Telephone: 303-761-1340

Date of Government Version: 10/15/83

Date of Last EDR Contact: 01/27/95

Date of Next Scheduled EDR Contact: N/A

Date of Next Scheduled EDR Contact: N/A

WELD COUNTY:

Disposal & Treatment Sites

Source: Weld County Health Department

Telephone: 970-353-0586

Date of Government Version: 11/01/95

Date of Last EDR Contact: 11/13/95

Date of Next Scheduled EDR Contact: N/A

EDR PROPRIETARY HISTORICAL DATABASES

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

Disclaimer Provided by Real Property Scan, Inc.

The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines/Electrical Transmission Lines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines and electrical transmission lines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

STREET AND ADDRESS INFORMATION

© 2001 Geographic Data Technology, Inc., Rel. 07/2001. This product contains proprietary and confidential property of Geographic Data Technology, Inc. Unauthorized use, including copying for other than testing and standard backup procedures, of this product is expressly prohibited.

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

NORTH BUCKLEY AFB STEAMBOAT AVE AURORA, CO 80011

TARGET PROPERTY COORDINATES

Latitude (North): 39.722099 - 39° 43' 19.6" Longitude (West): 104.787498 - 104° 47' 15.0"

Universal Tranverse Mercator: Zone 13 UTM X (Meters): 518212.8 UTM Y (Meters): 4396726.0

EDR's GeoCheck Physical Setting Source Addendum has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

Assessment of the impact of contaminant migration generally has two principle investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

USGS TOPOGRAPHIC MAP ASSOCIATED WITH THIS SITE

Target Property: 2439104-F7 FITZSIMONS, CO

Source: USGS 7.5 min quad index

GENERAL TOPOGRAPHIC GRADIENT AT TARGET PROPERTY

Target Property: General WNW

Source: General Topographic Gradient has been determined from the USGS 1 Degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

FEMA Flood

Target Property County Electronic Data

ARAPAHOE, CO YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 0800020185J

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Electronic

NWI Quad at Target Property Data Coverage

FITZSIMONS YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 2.000 Miles.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

	LOCATION	GENERAL DIRECTION
MAP ID	FROM TP	GROUNDWATER FLOW
53	1 - 2 Miles NNE	WNW
54	1 - 2 Miles NE	NW
N55	1 - 2 Miles West	NNE

For additional site information, refer to Physical Setting Source Map Findings.

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

GEOLOGIC AGE IDENTIFICATION

Era: Cenozoic Category: Continental Deposits

System: Tertiary
Series: Paleocene

Code: Txc (decoded above as Era, System & Series)

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: WELD
Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward

movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained. Soils have intermediate water holding capacity. Depth to

water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

			Soil Layer	Information			
	Boundary Classification						
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	5 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 7.80 Min: 6.60
2	5 inches	19 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.20 Min: 0.06	Max: 7.80 Min: 6.60
3	19 inches	40 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 9.00 Min: 7.40
4	40 inches	60 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 9.00 Min: 7.40

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property. $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{1}{2}$

Soil Surface Textures: silty clay loam

silt loam

Surficial Soil Types: silty clay loam

silt loam

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: loam

silty clay loam

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

LOCATION

WELL SEARCH DISTANCE INFORMATION

DATABASE SEARCH DISTANCE (miles)

Federal USGS 1.000

Federal FRDS PWS Nearest PWS within 1 mile

State Database 1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
	3944101044 71301	1/2 - 1 Mile North

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

			LOCATION
MAP ID		WELL ID	FROM TP
N. 514/6 6	_		

No PWS System Found

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

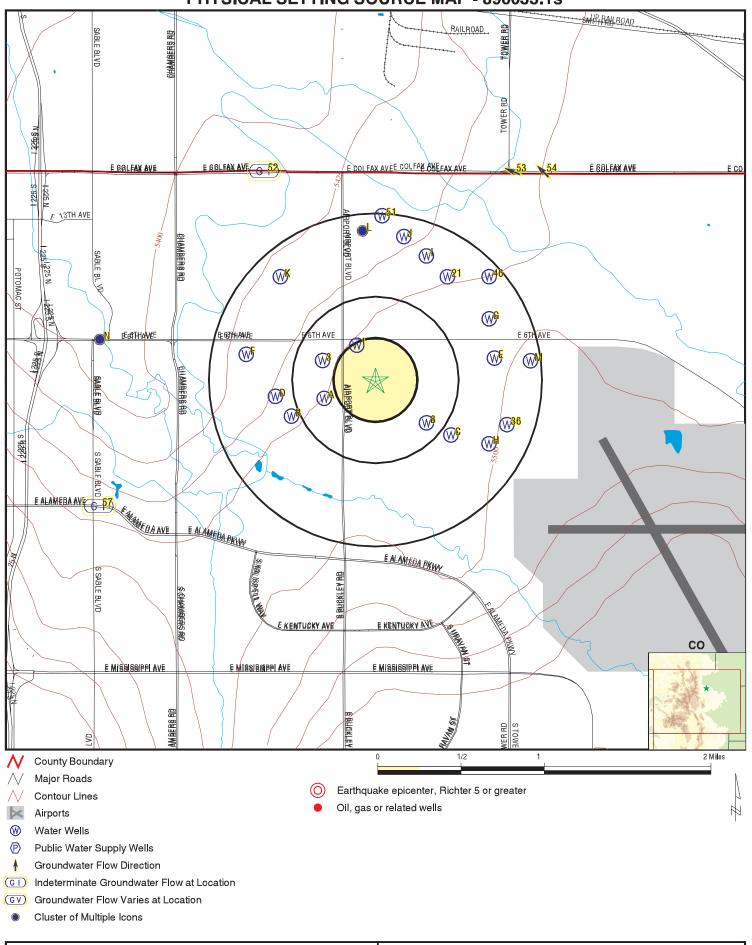
MAP ID	WELL ID	LOCATION FROM TP
1	COWW260649	1/8 - 1/4 Mile NNW
A2	COWW261596	1/4 - 1/2 Mile West
3	COWW261520	1/4 - 1/2 Mile WNW
A4	COWW261233	1/4 - 1/2 Mile WSW
A5	COWW261058	1/4 - 1/2 Mile WSW
A6	COWW260889	1/4 - 1/2 Mile WSW
A7	COWW070306	1/4 - 1/2 Mile WSW
8	COWW016394	1/4 - 1/2 Mile SE
B9	COWW184802	1/2 - 1 Mile WSW

GEOCHECK[®] - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
WAF ID		
C10	COWW038074	1/2 - 1 Mile ESE
C11	COWW037254	1/2 - 1 Mile ESE
B12	COWW110817	1/2 - 1 Mile WSW
C13	COWW027060	1/2 - 1 Mile SE
D14	COWW261048	1/2 - 1 Mile WSW
D15	COWW261371	1/2 - 1 Mile WSW
D16	COWW261351	1/2 - 1 Mile WSW
D17	COWW013694	1/2 - 1 Mile West
D18	COWW125377	1/2 - 1 Mile West
E19	COWW038596	1/2 - 1 Mile East
F20	COWW155375	1/2 - 1 Mile WNW
21	COWW260791	1/2 - 1 Mile NE
E22	COWW216243	1/2 - 1 Mile East
F23	COWW155374	1/2 - 1 Mile WNW
G24	COWW259998	1/2 - 1 Mile ENE
G25	COWW041660	1/2 - 1 Mile ENE
G26	COWW026121	1/2 - 1 Mile ENE
H27	COWW020403	1/2 - 1 Mile ESE
H28	COWW003579	1/2 - 1 Mile ESE
H29	COWW035265	1/2 - 1 Mile ESE
H30	COWW084155	1/2 - 1 Mile ESE
I31	COWW013872	1/2 - 1 Mile NNE
132	COWW030954	1/2 - 1 Mile NNE
J33	COWW261897	1/2 - 1 Mile North
F34	COWW019360	1/2 - 1 Mile West
F35	COWW261251	1/2 - 1 Mile West
36	COWW005762	1/2 - 1 Mile ESE
K37	COWW259732	1/2 - 1 Mile NW
K38	COWW260519	1/2 - 1 Mile NW
L39	COWW261509	1/2 - 1 Mile North
L40	COWW260748	1/2 - 1 Mile North
J41	COWW260182	1/2 - 1 Mile NNE
J42	COWW260324	1/2 - 1 Mile NNE
J43	COWW083907	1/2 - 1 Mile NNE
J44	COWW261031	1/2 - 1 Mile NNE
L45	COWW261682	1/2 - 1 Mile North
46	COWW048277	1/2 - 1 Mile NE
M47	COWW038595	1/2 - 1 Mile East
M48	COWW035029	1/2 - 1 Mile East
M49	COWW041919	1/2 - 1 Mile East
51	COWW262049	1/2 - 1 Mile North

PHYSICAL SETTING SOURCE MAP - 896033.1s



CUSTOMER: Geo-Marine TARGET PROPERTY: North Buckley AFB ADDRESS: Steamboat Ave CONTACT: Donna DeYoung CITY/STATE/ZIP: INQUIRY#: Aurora CO 80011 896033.1s LAT/LONG: 39.7221 / 104.7875

DATE: December 11, 2002 1:05 pm

Map ID Direction Distance

EDR ID Number Elevation Database

NNW **CO WELLS** COWW260649

1/8 - 1/4 Mile Lower

> Site Name: AURORA PUBLIC SCHOOLS

Mailing Address: 1085 PEORIA

AURORA, CO 80011

Telephone: Not Reported

Water Division: County Code: Receipt: 9006324 Permit Number: 18949 Suffix Code: F Replacement Code: Not Reported

Parcel: Valid Well: Yes

Application Date: Not Reported Application Status: Not Reported Not Reported Permit Status: Permit Stat Date: Not Reported Last Action Updated: Not Reported Not Reported Last Action Date:

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min): 0 Well Proposed Depth (Feet): 0 Proposed Annual Appropriation (Acre Feet):

Well Application Type: Not reported Well Type: Non-exempt First Beneficial Use Date: 10/01/1975 Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Not Reported Plugged an Abandoned Date:

Annual Appropriation in Acre Feet: 0 Depth to Top of 1st Perforated Casing: 0000 Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: 75 Total Depth of Well: 1330 Depth to Static Water Level: 360 Ground Surface Elevation: 0 Acres Irrigated: 12 Totaling Flow Meter Reqd., Installed: Ν

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Well ID Number: 00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Not Reported Contractor's License: Pump Installer's License: Not Reported Not Reported Pump Installation Report to DWR: Statute Which Permit Issued Under: Not Reported Not Reported Last Staff Member to Update File: 02

Water District:

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00

Principal Meridian: Dist from Section Line: 170N 420W 0660W 040S Range: Township: 1/4 Section: NW Section: 09

1/4 1/4: NW 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported

Loc_source:

Sub Division:Not ReportedLot Number:Not ReportedBlock Number:Not ReportedFiling Number:Not ReportedApproval Engineer:Not ReportedDesignation Number:Not Reported

 Comments:
 Not Reported

 Utm_x:
 518077.813

 Utm_y:
 4397062.5

Usage: Crop Irrigation

A2
West CO WELLS COWW261596

1/4 - 1/2 Mile Lower

Site Name: HAMMONS DON
Mailing Address: RT 3 BOX 366 A
AURORA, CO 80011

Telephone: Not Reported

Water Division:1County Code:3Receipt:9007307Permit Number:68744

Suffix Code: Not Reported Replacement Code: Not Reported Valid Well: Parcel: 0

Application Date: Not Reported
Application Status: Not Reported
Permit Status: Not Reported
Permit Stat Date: Not Reported
Last Action Updated: Not Reported
Last Action Date: Not Reported

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

O Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: 07/21/1973 Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Not Reported Permit Expiration Date: Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

10

10

240

340

Acres Irrigated:

11

Totaling Flow Meter Reqd., Installed:

N

Cross Reference to Another Well or Record:
Not Reported
Notice of Well Completion Recvd. for Non-trib Aquifer:
Not Reported
Not Reported
Not Reported
Not Reported
Not Reported
Not Reported
00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

Not Reported

Not Reported

Not Reported

Not Reported

Not Reported

Not Reported

CarteView 2/17/2000

Last Staff Member to Update File: Not Reported

Water District:

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00

 Principal Meridian:
 S
 Dist from Section Line:
 1400N 400E

 Range:
 0660W
 Township:
 040S

 Section:
 08
 1/4 Section:
 NE

 1/4 1/4:
 SE
 1/4 1/4:
 Not Reported

Not Reported Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Not Reported Block Number: Filing Number: Not Reported Not Reported Approval Engineer: **Designation Number:** Not Reported

Comments: Not Reported Utm_x: 517828.125

Utm_y: 4396687.5 Loc_source: CarteView 2/17/2000

Usage: Domestic

3 WNW CO WELLS COWW261520 1/4 - 1/2 Mile Lower

Site Name: CHASE WILSON A & GISELA E

Mailing Address: 16800 E 4TH AVE

AURORA, CO 80010

Telephone: Not Reported

Water Division:1County Code:3Receipt:9007232Permit Number:62735Suffix Code:Not ReportedReplacement Code:Not Reported

Valid Well: Yes Parcel:

Application Date: Not Reported Application Status: Not Reported Permit Status: Not Reported Permit Stat Date: Not Reported Last Action Updated: Not Reported Last Action Date: Not Reported

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: 12/30/1940 Date Statement of Use Received: Not Reported Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: 15
Total Depth of Well: 0
Depth to Static Water Level: 0
Ground Surface Elevation: 0
Acres Irrigated: 1
Totaling Flow Meter Reqd., Installed: N

Cross Reference to Another Well or Record:

Not Reported
Notice of Well Completion Recvd. for Non-trib Aquifer:

Not Reported
Not Reported
Not Reported
Not Reported

Well ID Number: 00000
Well Construction Completed Date: Not Reported
Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Not Reported

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

Last Staff Member to Update File:

Not Reported

Not Reported

Water District: 02

Groundwater Basin Numb:00Basin Mgmt Dist Numb:00Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:081/4 Section:NE

1/4 1/4: NE 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Not Reported Not Reported Block Number: Filing Number: Not Reported Approval Engineer: Designation Number: Not Reported

Comments: Not Reported Utm_x: 517747.219

Utm_y: 4396914 Loc_source: CarteView 2/17/2000

Usage: Domestic

A4
WSW
CO WELLS COWW261233

1/4 - 1/2 Mile Lower

Site Name: WALLACE JAMES
Mailing Address: 260 LARADO
AURORA, CO 80010

Telephone: Not Reported

Water Division:1County Code:3Receipt:9006945Permit Number:43638Suffix Code:Not ReportedReplacement Code:Not Reported

Valid Well: Yes Parcel: 0

Application Date: Not Reported Application Status: Not Reported Permit Status: Not Reported Permit Stat Date: Not Reported Last Action Updated: Not Reported Last Action Date: Not Reported

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Not Reported Date Statement of Use Received: Date Amended to Include Animals: Not Reported Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: 20

Total Depth of Well: 600 Depth to Static Water Level: 360 Ground Surface Elevation: 0 Acres Irrigated: 0 Totaling Flow Meter Reqd., Installed: Ν

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aguifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: 00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License: Not Reported Pump Installer's License: Not Reported Not Reported Pump Installation Report to DWR: Statute Which Permit Issued Under: Not Reported Last Staff Member to Update File: Not Reported 02

Water District:

Basin Mgmt Dist Numb: Groundwater Basin Numb: 00 00 Principal Meridian: Dist from Section Line: 0 0 0660W Township: 040S Range: Section: 80 1/4 Section: ΝE

1/4 1/4: SE 1/4 1/4 1/4: Not Reported Not Reported Aquifer: GW 2nd Aquifer: Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Approval Engineer: Not Reported Designation Number: Not Reported

Comments: Not Reported Utm_x: 517747.75

CarteView 2/17/2000 Utm_y: 4396513 Loc_source:

Domestic Usage:

WSW **CO WELLS** COWW261058

1/4 - 1/2 Mile Lower

> Site Name: HAMMOS DON Mailing Address: 16850 22ND AVE

AURORA, CO 80010 Telephone: Not Reported

County Code: Water Division:

Receipt: 9006770 Permit Number: 33841 Suffix Code: Not Reported Replacement Code: Not Reported

Valid Well: Parcel: Yes

Not Reported Application Date: Application Status: Not Reported Permit Status: Not Reported Permit Stat Date: Not Reported Last Action Updated: Not Reported Last Action Date: Not Reported

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min): 0 Well Proposed Depth (Feet): 0 Proposed Annual Appropriation (Acre Feet):

Well Application Type: Not reported Well Type: Exempt 06/05/1968 First Beneficial Use Date: Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported 3

Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: Depth to Top of 1st Perforated Casing: 0000 Depth to Base of Last Perforated Casing: 0000

Not Reported Water Court Case Number:

Yield in Gallons Per Minute: 568 Total Depth of Well: Depth to Static Water Level: 260 Ground Surface Elevation: 0 Acres Irrigated: 0 Totaling Flow Meter Reqd., Installed: Ν

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: 00000 Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License: Not Reported Pump Installer's License: Not Reported Pump Installation Report to DWR: Not Reported Statute Which Permit Issued Under: Not Reported Last Staff Member to Update File: Not Reported 02

Water District:

00 Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: Principal Meridian: Dist from Section Line: 0 0 Range: 0660W Township: 040S Section: 80 1/4 Section: ΝE

1/4 1/4: SE 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Not Reported Sub Division: Lot Number: Not Reported Block Number: Not Reported Not Reported Filing Number: Approval Engineer: Not Reported **Designation Number:** Not Reported

Comments: Not Reported 517747.75 Utm x:

4396513 CarteView 2/17/2000 Utm_y: Loc_source:

Usage: Domestic

Α6 wsw CO WELLS COWW260889 1/4 - 1/2 Mile

Lower

HAMMONS DON P Site Name: Mailing Address: RT 3 BOX 366A AURORA, CO 80010

Telephone: Not Reported

County Code: Water Division: Receipt: 9006566 Permit Number: 26301 Suffix Code: Not Reported Replacement Code: Not Reported Parcel:

Valid Well: Yes

Application Date: Not Reported **Application Status:** Not Reported Permit Status: Not Reported Permit Stat Date: Not Reported Last Action Updated: Not Reported Last Action Date: Not Reported

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min): 0 Well Proposed Depth (Feet): 0 Proposed Annual Appropriation (Acre Feet): 0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: 02/09/1966 Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: Depth to Top of 1st Perforated Casing: 0000 Depth to Base of Last Perforated Casing: 0000

Not Reported Water Court Case Number:

Yield in Gallons Per Minute: Total Depth of Well: 615 Depth to Static Water Level: 252 Ground Surface Elevation: 0 Acres Irrigated: 0 Totaling Flow Meter Regd., Installed: Ν

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: 00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License: Not Reported Pump Installer's License: Not Reported Pump Installation Report to DWR: Not Reported Statute Which Permit Issued Under: Not Reported Not Reported Last Staff Member to Update File: 02

Water District:

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00 Principal Meridian: Dist from Section Line: 0 0 0660W Township: 040S Range: 1/4 Section: Section: 80 NE

1/4 1/4: SE 1/4 1/4 1/4: Not Reported Aquifer: 2nd Aquifer: GW Not Reported Sub Division: Not Reported Lot Number: Not Reported Not Reported Block Number: Filing Number: Not Reported Approval Engineer: Not Reported **Designation Number:** Not Reported

Not Reported Comments:

Usage:

Lower

Mailing Address:

Utm_x: 517747.75 4396513

Utm_y: Loc_source: CarteView 2/17/2000

Domestic

A7 WSW **CO WELLS** COWW070306 1/4 - 1/2 Mile

Site Name: ROBERTS B

ENGLEWOOD, CO 80111

Not Reported

Telephone: Not Reported

Water Division: County Code: 0211685 Permit Number: 118557 Receipt: Suffix Code: Not Reported Replacement Code: Not Reported

Valid Well: Yes Parcel:

Application Date: 01/27/1981 **Application Status:** Well permit issued

Permit Status: Application for permit resubmitted to DWR

Permit Stat Date: 02/06/1981 Last Action Updated: Not Reported Last Action Date: Not Reported

Permit, Denial (AD) or Monitoring Hole Issued: 03/06/1981 Construction/Test report Received by DWR: 10/13/1981

Well Proposed Yield (Gal/Min): 0 Well Proposed Depth (Feet): 0 Proposed Annual Appropriation (Acre Feet): 0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Not Reported Date Amended to Include Animals: Permit Expiration Date: Not Reported Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date:

Annual Appropriation in Acre Feet: 0 Depth to Top of 1st Perforated Casing: 0000 Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: 0 Total Depth of Well: 0 Depth to Static Water Level: 0 Ground Surface Elevation: 0 Acres Irrigated: 0 Totaling Flow Meter Reqd., Installed: Ν

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aguifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: 00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported Geophysical is Required and Received: No

Contractor's License: 735 Pump Installer's License: Not Reported Pump Installation Report to DWR: Not Reported Statute Which Permit Issued Under: Not Reported Last Staff Member to Update File: Not Reported

Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00 0 0 Principal Meridian: Dist from Section Line: Range: 0660W Township: 040S Section: 80 1/4 Section: NE

SE 1/4 1/4: 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Not Reported Not Reported Approval Engineer: Designation Number:

Not Reported Comments: Utm_x: 517747.75

4396513 CarteView 2/17/2000 Utm_y: Loc_source:

Usage: Domestic

Map ID Direction Distance

Elevation Database EDR ID Number

8 SE CO WELLS COWW016394

1/4 - 1/2 Mile Higher

Site Name: BUCKLEY AIR NATIONAL GUARD BASE

Mailing Address: C/O 7000 E 47TH AVE #900

DENVER, CO 80216

Telephone: Not Reported

Water Division:1County Code:3Receipt:0018685Permit Number:18685Suffix Code:MHReplacement Code:Not Reported

Valid Well: No Parcel: 0

Application Date: 02/14/1992

Application Status: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Permit Status: Not Reported Permit Stat Date: Not Reported

Last Action Updated: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Last Action Date: 02/24/1992

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min): 0
Well Proposed Depth (Feet): 0
Proposed Annual Appropriation (Acre Feet): 0

Well Application Type: Not reported Well Type: Non-exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Not Reported Plugged an Abandoned Date:

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

0

Cross Reference to Another Well or Record:
Notice of Well Completion Recvd. for Non-trib Aquifer:
Not Reported
Notice of Beneficial Use Recvd. for Non-trib Aquifer:
Well ID Number:

Not Reported
Not Reported
00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No Contractor's License: LIC

Pump Installer's License:

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

Last Staff Member to Update File:

Not Reported

Not Reported

Not Reported

Water District:

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00 Principal Meridian: S Dist from Section Line: 0 0 Range: 0660W Township: 040S

Section:091/4 Section:Not Reported1/4 1/4:Not Reported1/4 1/4 1/4:Not ReportedAquifer:GW2nd Aquifer:Not Reported

02

Sub Division:Not ReportedLot Number:Not ReportedBlock Number:Not ReportedFiling Number:Not ReportedApproval Engineer:Not ReportedDesignation Number:Not Reported

Comments: Not Reported Utm_x: 518753.063 Utm_y: 4396313.5

Itm_y: 4396313.5 Loc_source: CarteView 2/17/2000

Usage: Q

WSW CO WELLS COWW184802 1/2 - 1 Mile

Lower

Site Name: R&R WELL & PUMP INC

Mailing Address: BOX 577

GREELEY, CO 80632

Telephone: 9703533118

Water Division: 1 County Code:

Receipt: 0410059A Permit Number: 200481 Suffix Code: Not Reported Replacement Code: Not Reported

Valid Well: Yes Parcel: 0

Application Date: 12/27/1996
Application Status: Well permit issued
Permit Status: Not Reported
Permit Stat Date: Not Reported

Last Action Updated: Well construction report received

Last Action Date: 01/24/1997

Permit, Denial (AD) or Monitoring Hole Issued: 01/08/1997 Construction/Test report Received by DWR: 01/23/1997 Well Proposed Yield (Gal/Min): 0

Well Proposed Depth (Feet): 300
Proposed Annual Appropriation (Acre Feet): 0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Not Reported Date Statement of Use Received: Date Amended to Include Animals: Not Reported Permit Expiration Date: 01/08/1999 Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

0

Cross Reference to Another Well or Record:

Not Reported
Notice of Well Completion Recvd. for Non-trib Aquifer:
Notice of Beneficial Use Recvd. for Non-trib Aquifer:
Well ID Number:

Well Construction Completed Date:

Not Reported
Not Reported
00000
01/07/1997

Pump Installation Completed Date:

Geophysical is Required and Received:

No
No

Geophysical is Required and Received: No Contractor's License: 857

 Pump Installer's License:
 Not Reported

 Pump Installation Report to DWR:
 Not Reported

 Statute Which Permit Issued Under:
 Not Reported

Last Staff Member to Update File: NLH Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00

Principal Meridian:SDist from Section Line:2650N 1500ERange:0660WTownship:040SSection:081/4 Section:SE

1/4 1/4: NW 1/4 1/4 1/4: Not Reported Aquifer: **TKD** 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Approval Engineer: **JSG Designation Number:** Not Reported

Comments: OPEN HOLE Utm_x: 517493.125

Utm_y: 4396307 Loc_source: CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

C10
ESE CO WELLS COWW038074
1/2 - 1 Mile
Higher

Site Name: COLORADO AIR NATIONAL GUARD

Mailing Address: AGINS/CEV STOP 26

AGINS/CEV STOP 26

BUCKLEY ANG BAS, CO 80011 - 9551

Telephone: 3036779100

Water Division:1County Code:3Receipt:0036784Permit Number:52353Suffix Code:FReplacement Code:Not ReportedValid Well:NoParcel:3243

Application Date: 04/19/1999
Application Status: Well permit issued
Permit Status: Code S5 - Undefined

Permit Stat Date: 06/08/2000

Last Action Updated: Code S5 - Undefined

Last Action Date: 06/09/2000

Permit, Denial (AD) or Monitoring Hole Issued: 08/24/1999
Construction/Test report Received by DWR: 12/07/1999
Well Proposed Yield (Gal/Min): 160
Well Proposed Depth (Feet): 1115
Proposed Annual Appropriation (Acre Feet): 54

Well Application Type: Not reported Well Type: Not reported First Beneficial Use Date: Not Reported Not Reported Date Statement of Use Received: Date Amended to Include Animals: Not Reported Permit Expiration Date: 08/24/2000 Abandonment Report Received: Not Reported Not Reported Plugged an Abandoned Date:

Annual Appropriation in Acre Feet:

Depth to Top of 1st Perforated Casing:

Depth to Base of Last Perforated Casing:

-999

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: 175
Total Depth of Well: 1378
Depth to Static Water Level: 638
Ground Surface Elevation: 5525
Acres Irrigated: 0

Totaling Flow Meter Reqd., Installed:

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aquifer: 06/08/20

Notice of Beneficial Use Recvd. for Non-trib Aquifer: 06/08/20

Well ID Number: 00000
Well Construction Completed Date: 11/01/1999
Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: Yes Contractor's License: 1200

Pump Installer's License:

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

Not Reported

Not Reported

Not Reported

Last Staff Member to Update File: ADS Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00

Principal Meridian:SDist from Section Line:2880N 1810ERange:0660WTownship:040SSection:091/4 Section:SE

1/4 1/4: NW 1/4 1/4 1/4: Not Reported Aquifer: LKA 2nd Aquifer: Not Reported Not Reported Not Reported Sub Division: Lot Number: Not Reported Not Reported Block Number: Filing Number: Approval Engineer: **KGR Designation Number:** Not Reported

Comments: Not Reported

Utm_x: 519006.656

Utm_y: 4396238.5 Loc_source: CarteView 2/17/2000

Usage: Industrial

1/2 - 1 Mil Higher

Site Name: COLORADO AIR NATIONAL GUARD

Mailing Address: AGISS/CEV STOP 26 AGISS/CEV STOP 26

BUCKLEY ANG BAS, CO 80011 - 9552

Telephone: Not Reported

Water Division: 1 County Code: 3
Receipt: 0035980 Permit Number: 14318
Suffix Code: AD Replacement Code: Not Reported

Valid Well: No Parcel:

Application Date: 04/19/1999

Application Status: Application denied. Denial number in permit number Permit Status: Record change. A portion of the file was modified

Permit Stat Date: 05/07/1999

Last Action Updated: Record change. A portion of the file was modified

Last Action Date: 08/24/1999

Permit, Denial (AD) or Monitoring Hole Issued: 05/07/1999
Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min): 160
Well Proposed Depth (Feet): 1500
Proposed Annual Appropriation (Acre Feet): 54

Well Application Type: Not reported Well Type: Not reported First Beneficial Use Date: Not Reported Not Reported Date Statement of Use Received: Date Amended to Include Animals: Not Reported Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

N

Cross Reference to Another Well or Record:

Cross Reference to Another Well or Record:

Notice of Well Completion Recvd. for Non-trib Aquifer:

Notice of Beneficial Use Recvd. for Non-trib Aquifer:

Well ID Number:

052353F

Not Reported
Not Reported
00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported Geophysical is Required and Received: No Contractor's License: 1200

Pump Installer's License:Not ReportedPump Installation Report to DWR:Not ReportedStatute Which Permit Issued Under:Not Reported

Last Staff Member to Update File: RAB Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00

Principal Meridian:SDist from Section Line:2880N 1810ERange:0660WTownship:040SSection:091/4 Section:SE

1/4 1/4: NW 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Not Reported Filing Number: Not Reported Block Number: Approval Engineer: Not Reported **Designation Number:** Not Reported

Comments: Not Reported Utm_x: 519006.656

 Utm_y:
 4396238.5
 Loc_source:
 CarteView 2/17/2000

Usage: Industrial

B12
WSW CO WELLS COWW110817

1/2 - 1 Mile Lower

Site Name: TECH ACTION INC
Mailing Address: 16363 EAST 2ND AVE
AURORA, CO 80011

Telephone: Not Reported

Water Division:1County Code:3Receipt:0287576BPermit Number:49235Suffix Code:Not ReportedReplacement Code:AValid Well:YesParcel:0

Application Date: 05/10/1988
Application Status: Well permit issued

Permit Status: Application for permit resubmitted to DWR

Permit Stat Date: 05/20/1988

Last Action Updated: Record change. A portion of the file was modified

Last Action Date: 07/27/1994

Permit, Denial (AD) or Monitoring Hole Issued: 06/16/1988 Construction/Test report Received by DWR: 06/29/1988

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type:

Well Type:

First Beneficial Use Date:

Not reported

Exempt

Not Reported

Date Statement of Use Received:

Date Amended to Include Animals:

Permit Expiration Date:

Abandonment Report Received:

Plugged an Abandoned Date:

Not Reported

Not Reported

Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0560
Depth to Base of Last Perforated Casing: 0620

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: Total Depth of Well: 0 Depth to Static Water Level: 0 Ground Surface Elevation: 0 Acres Irrigated: 0 Totaling Flow Meter Regd., Installed: Ν Cross Reference to Another Well or Record: 049235 Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: 00000

Well Construction Completed Date:

Not Reported
Pump Installation Completed Date:

Not Reported

Geophysical is Required and Received: No Contractor's License: 1134

Pump Installer's License:

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

Not Reported

Not Reported

Not Reported

Last Staff Member to Update File: RAB

Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00
Principal Meridian: S Dist from Section Line: 2200N 1800E

 Range:
 0660W
 Township:
 040S

 Section:
 08
 1/4 Section:
 NE

SW 1/4 1/4 1/4: Not Reported 1/4 1/4: Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Not Reported Approval Engineer: Not Reported Designation Number:

Comments: Not Reported Utm_x: 517401.594

Utm_y: 4396444.5 Loc_source: CarteView 2/17/2000

Usage: Domestic

C13

1/2 - 1 Mile Higher

Site Name: BUCKLEY ANG BASE

Mailing Address: C/O HAZWASTE TECH CORP

C/O HAZWASTE TECH CORP

BOULDER, CO 80301

Telephone: 3034405664

Water Division:1County Code:3Receipt:0027191Permit Number:27191Suffix Code:MHReplacement Code:Not Reported

Valid Well: No Parcel:

Application Date: 12/20/1995

Application Status: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Permit Status: Not Reported
Permit Stat Date: Not Reported

Last Action Updated: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

CO WELLS

COWW027060

Last Action Date: 12/29/1995 Permit, Denial (AD) or Monitoring Hole Issued: 12/20/1995

Construction/Test report Received by DWR: Not Reported Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet): 0 Proposed Annual Appropriation (Acre Feet): 0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: 03/20/1996 Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0 Depth to Top of 1st Perforated Casing: 0000 Depth to Base of Last Perforated Casing: 0000

Not Reported Water Court Case Number:

Yield in Gallons Per Minute: Total Depth of Well: 0 Depth to Static Water Level: 0 Ground Surface Elevation: 0 Acres Irrigated: 0 Totaling Flow Meter Reqd., Installed: Ν

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported 00000 Well ID Number:

Well Construction Completed Date: Not Reported Not Reported Pump Installation Completed Date:

Geophysical is Required and Received: No Contractor's License: **AUTH** Pump Installer's License: Not Reported Pump Installation Report to DWR: Not Reported Statute Which Permit Issued Under: Not Reported

Last Staff Member to Update File: RAB Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00 Principal Meridian: S Dist from Section Line: 0 0 Range: 0660W Township: 040S Section: 09 1/4 Section: SE

NW Not Reported 1/4 1/4: 1/4 1/4 1/4: Aquifer: GW 2nd Aquifer: Not Reported Not Reported Sub Division: Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Approval Engineer: Not Reported **Designation Number:** Not Reported

Comments: Not Reported Utm_x: 518955.313

Utm_y: 4396113 CarteView 2/17/2000 Loc_source:

Usage: Q, Monitoring Well (Permitted)

D14 1/2 - 1 Mile Lower

CO WELLS COWW261048

EHALT GEORGE Site Name: Mailing Address: 275 REYNOLDS AURORA, CO 80010

Telephone:

Not Reported

Water Division: County Code: Receipt: 9006760 Permit Number: 33138 Suffix Code: Not Reported Replacement Code: Not Reported

Valid Well: Parcel:

Not Reported Application Date: Not Reported **Application Status:** Permit Status: Not Reported Permit Stat Date: Not Reported Last Action Updated: Not Reported Not Reported Last Action Date:

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min): Well Proposed Depth (Feet): 0 Proposed Annual Appropriation (Acre Feet): 0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: 03/15/1968 Date Statement of Use Received: Not Reported Not Reported Date Amended to Include Animals: Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: Depth to Top of 1st Perforated Casing: 0000 Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: 0 Total Depth of Well: 120 Depth to Static Water Level: 0 Ground Surface Elevation: 0 Acres Irrigated: 0 Totaling Flow Meter Regd., Installed:

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Well ID Number: 00000 Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License: Not Reported Pump Installer's License: Not Reported Not Reported Pump Installation Report to DWR: Not Reported Statute Which Permit Issued Under: Last Staff Member to Update File: Not Reported

Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00 Principal Meridian: S Dist from Section Line: 0 0 0660W Range: Township: 040S Section: 80 1/4 Section: NE 1/4 1/4: SW 1/4 1/4 1/4: Not Reported

Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Approval Engineer: Not Reported **Designation Number:** Not Reported

Comments: Not Reported 517342.75 Utm_x:

Utm_y: 4396513.5 Loc_source: CarteView 2/17/2000

Usage: Domestic

Map ID Direction Distance

Elevation Database EDR ID Number

D15
WSW CO WELLS COWW261371

1/2 - 1 Mile Lower

Site Name: SCHOONOVER EDWIN

Mailing Address: 256 LAREDO

AURORA, CO 80011

Telephone: Not Reported

Water Division:1County Code:3Receipt:9007083Permit Number:50542Suffix Code:Not ReportedReplacement Code:Not Reported

Valid Well: Yes Parcel:

Application Date:
Application Status:
Permit Status:
Permit Stat Date:
Not Reported
Not Reported
Not Reported
Not Reported

Last Action Updated: Record change. A portion of the file was modified

Last Action Date: 02/28/1994

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: 11/30/1971 Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Not Reported Plugged an Abandoned Date:

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

0

Cross Reference to Another Well or Record:
Notice of Well Completion Recvd. for Non-trib Aquifer:
Not Reported
Notice of Beneficial Use Recvd. for Non-trib Aquifer:
Well ID Number:

Not Reported
Not Reported
Not Reported
Not Reported
Not Reported

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Not Reported

Not Reported

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

Not Reported

Not Reported

Not Reported

Last Staff Member to Update File: RAB Water District: 02

Groundwater Basin Numb:00Basin Mgmt Dist Numb:00Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:081/4 Section:NE

 1/4 1/4:
 SW
 1/4 1/4 1/4:
 Not Reported

 Aquifer:
 GW
 2nd Aquifer:
 Not Reported

Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Approval Engineer: Not Reported **Designation Number:** Not Reported

Not Reported Comments: Utm_x: 517342.75 Utm_y: 4396513.5

CarteView 2/17/2000 Loc_source:

Usage: **Domestic**

D16 wsw **CO WELLS** COWW261351 1/2 - 1 Mile

Lower

ADAMS ROBERT L & FRANCES M Site Name:

Mailing Address: 275 REYNOLDS RD

AURORA, CO 80010

Telephone: Not Reported

Water Division: County Code: Receipt: 9007063 Permit Number: 49235 Suffix Code: Not Reported Replacement Code: Not Reported

Valid Well: Yes Parcel:

Application Date: Not Reported **Application Status:** Not Reported Permit Status: Not Reported Permit Stat Date: Not Reported Not Reported Last Action Updated: Last Action Date: Not Reported

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min): 0 0 Well Proposed Depth (Feet): Proposed Annual Appropriation (Acre Feet): 0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: 10/08/1971 Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Not Reported Permit Expiration Date: Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0 Depth to Top of 1st Perforated Casing: 0000 Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: 15 Total Depth of Well: 623 Depth to Static Water Level: 325 Ground Surface Elevation: 0 Acres Irrigated: 0 Totaling Flow Meter Reqd., Installed: Ν

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: 00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License: Not Reported Not Reported Pump Installer's License: Pump Installation Report to DWR: Not Reported Statute Which Permit Issued Under: Not Reported

Last Staff Member to Update File: Not Reported

Water District:

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00 Principal Meridian: Dist from Section Line: 0 0 0660W 040S Range: Township: Section: 80 1/4 Section: NE

1/4 1/4: SW 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Not Reported Block Number: Filing Number: Not Reported Not Reported Approval Engineer: **Designation Number:** Not Reported

Comments: Not Reported Utm_x: 517342.75

4396513.5 Loc_source: CarteView 2/17/2000 Utm_y:

Domestic Usage:

Lower

D17 West 1/2 - 1 Mile **CO WELLS** COWW013694

TIMKO STEVE Site Name: Mailing Address: 256 LAREDO ST AURORA, CO 80011

Telephone: Not Reported

Water Division: County Code: 0016712 Receipt: Permit Number: 90399 Suffix Code: VΕ Replacement Code: Not Reported

Valid Well: Parcel: No

Application Date: 08/17/1990

Verbal approval granted to well construction contractor Application Status:

Permit Status: Not Reported Permit Stat Date: Not Reported

Last Action Updated: Verbal approval granted to well construction contractor

Last Action Date: 08/21/1990

Permit, Denial (AD) or Monitoring Hole Issued: 08/17/1990 Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min): 0 Well Proposed Depth (Feet): 0 Proposed Annual Appropriation (Acre Feet): 0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0 Depth to Top of 1st Perforated Casing: 0000 Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: Total Depth of Well: 0 Depth to Static Water Level: 0 Ground Surface Elevation: 0 Acres Irrigated: 0 Totaling Flow Meter Reqd., Installed: Ν Cross Reference to Another Well or Record: 050542 Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aguifer: Not Reported

Well ID Number: 00000
Well Construction Completed Date: Not Reported
Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No Contractor's License: 489

Pump Installer's License:

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

Last Staff Member to Update File:

Not Reported

Not Reported

Not Reported

Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00

 Principal Meridian:
 S
 Dist from Section Line:
 1540N 2410E

 Range:
 0660W
 Township:
 040S

 Section:
 08
 1/4 Section:
 NE

 1/4 1/4:
 SW
 1/4 1/4 1/4:
 Not Reported

1/4 1/4: 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Not Reported Not Reported Block Number: Filing Number: Not Reported Approval Engineer: Designation Number: Not Reported

Comments: Not Reported Utm_x: 517215.5

Utm_y: 4396646 Loc_source: CarteView 2/17/2000

Usage: Domestic

Lower

D18
West CO WELLS COWW125377
1/2 - 1 Mile

Site Name: TIMKO STEVE J Mailing Address: 256 LAREDO ST

AURORA, CO 80011

Telephone: Not Reported

Water Division:1County Code:3Receipt:0317559Permit Number:50542Suffix Code:Not ReportedReplacement Code:AValid Well:NoParcel:0

Application Date: 09/06/1990
Application Status: Well permit issued
Permit Status: Not Reported
Permit Stat Date: Not Reported

Last Action Updated: Record change. A portion of the file was modified

Last Action Date: 02/28/1994

Permit, Denial (AD) or Monitoring Hole Issued: 11/21/1990
Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Not Reported Date Statement of Use Received: Date Amended to Include Animals: Not Reported Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: 0

Total Depth of Well: 0 Depth to Static Water Level: 0 Ground Surface Elevation: 0 Acres Irrigated: 0 Totaling Flow Meter Reqd., Installed: Ν Cross Reference to Another Well or Record: 050542 Notice of Well Completion Recvd. for Non-trib Aguifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: 00000 Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No Contractor's License: 489

Pump Installer's License:

Pump Installer's License:

Not Reported

Not Reported

Not Reported

Not Reported

Not Reported

Statute Which Permit Issued Under:

Last Staff Member to Update File:

RAB

Water District:

02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00

Principal Meridian:SDist from Section Line:1540N 2410ERange:0660WTownship:040SSection:081/4 Section:NE

1/4 1/4: SW 1/4 1/4 1/4: Not Reported Not Reported Aquifer: TKD 2nd Aquifer: Sub Division: WINDSOR GARDENS Lot Number: Not Reported Block Number: Filing Number: Not Reported Approval Engineer: **JWB** Designation Number: Not Reported

Comments: LOT WEST 1/2 BLK 7

Utm_x: 517215.5

Utm_y: 4396646 Loc_source: CarteView 2/17/2000

Usage: Domestic, Livestock

E19 CO WELLS COWW038596

East 1/2 - 1 Mile Higher

Site Name:

Mailing Address:

BUCKLEY AIR NATIONAL GUARD

SERM ROCKY MOUNTAIN

ERM ROCKY MOUNTAIN

GRNWD VLG, CO 80111

Telephone: 3037415050

Water Division:1County Code:3Receipt:0037249Permit Number:37249Suffix Code:MHReplacement Code:Not Reported

Valid Well: No Parcel: 0

Application Date: 10/29/1999

Application Status: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Permit Status: Not Reported Permit Stat Date: Not Reported

Last Action Updated: Record change. A portion of the file was modified

Last Action Date: 04/07/2000

Permit, Denial (AD) or Monitoring Hole Issued: 11/01/1999
Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type:

Well Type:

First Beneficial Use Date:

Date Statement of Use Received:

Not reported

Not Reported

Not Reported

Date Amended to Include Animals:

Permit Expiration Date:

Abandonment Report Received:

Plugged an Abandoned Date:

Not Reported

Not Reported

Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: 0 Total Depth of Well: 0 Depth to Static Water Level: 0 Ground Surface Elevation: 0 Acres Irrigated: 0 Totaling Flow Meter Reqd., Installed: Ν Cross Reference to Another Well or Record: 224835 Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: 00000

Well Construction Completed Date:

Not Reported
Pump Installation Completed Date:

Not Reported
Not Reported

Geophysical is Required and Received:

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

No

No

No

Not Reported

Not Reported

Last Staff Member to Update File: SMJ Water District: 02

Groundwater Basin Numb:00Basin Mgmt Dist Numb:0Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:091/4 Section:NE

1/4 1/4: NE 1/4 1/4 1/4: Not Reported Not Reported Aquifer: GW 2nd Aquifer: Sub Division: Lot Number: Not Reported Not Reported Block Number: Not Reported Filing Number: Not Reported Approval Engineer: SMJ **Designation Number:** Not Reported

Comments: Not Reported Utm_x: 519357.125

Utm_y: 4396916.5 Loc_source: CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

1/2 - 1 Mile Lower

Site Name: AMOCO OIL CO STATION #2174
Mailing Address: 8700 INDIAN CRK PKWY #200
OVERLAND PARK, KS 66210

Telephone: 9133394565

Water Division:1County Code:3Receipt:0368981BPermit Number:179437Suffix Code:Not ReportedReplacement Code:Not Reported

Valid Well: Yes Parcel:

Application Date: 04/29/1994
Application Status: Well permit issued

Permit Status: Application for permit resubmitted to DWR

Permit Stat Date: 06/15/1994
Last Action Updated: Well permit issued
Last Action Date: 06/28/1994

Permit, Denial (AD) or Monitoring Hole Issued: 06/28/1994

Construction/Test report Received by DWR: 06/15/1994
Well Proposed Yield (Gal/Min): .100000001
Well Proposed Depth (Feet): 37

Proposed Annual Appropriation (Acre Feet): 614

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: 06/28/1996 Permit Expiration Date: Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet:

Depth to Top of 1st Perforated Casing:

Depth to Base of Last Perforated Casing:

0026

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

0

Cross Reference to Another Well or Record:

Notice of Well Completion Recvd. for Non-trib Aquifer:

Notice of Beneficial Use Recvd. for Non-trib Aquifer:

Well ID Number:

Well Construction Completed Date:

Pump Installation Completed Date:

020970MH

Not Reported

Not Reported

07/08/1993

Not Reported

Geophysical is Required and Received:

Contractor's License:

Pump Installer's License:

Not Reported

Pump Installation Report to DWR:

Not Reported

Statute Which Permit Issued Under: 6023
Last Staff Member to Update File: LMD
Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00

Principal Meridian:SDist from Section Line:250N 2550WRange:0660WTownship:040SSection:081/4 Section:NW

 1/4 1/4:
 NE
 1/4 1/4 1/4:
 Not Reported

 Aquifer:
 GW
 2nd Aquifer:
 Not Reported

Sub Division:AURORA CENTRETECHLot Number:4Block Number:1Filing Number:12Approval Engineer:DWRDesignation Number:OW-6

Comments: Not Reported Utm_x: 517104.5

Utm_y: 4397039 Loc_source: CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

21 NE CO WELLS COWW260791 1/2 - 1 Mile

Site Name: HAHN ARNOLD H

Lower

Mailing Address:

2333 IVY

DENVER, CO 80202

Telephone: Not Reported

Water Division: 1 County Code: 3
Receipt: 9006468 Permit Number: 22015
Suffix Code: Not Reported Replacement Code: Not Reported

Valid Well: Yes Parcel: 0

Application Date: Not Reported Application Status: Not Reported Permit Status: Not Reported Permit Stat Date: Not Reported Last Action Updated: Not Reported Last Action Date: Not Reported

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: 10/20/1964 Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Not Reported Permit Expiration Date: Not Reported Abandonment Report Received: Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Cross Reference to Another Well or Record:

Not Reported

Notice of Well Completion Recvd. for Non-trib Aquifer:

Not Reported

00000

Well Construction Completed Date:

Not Reported
Pump Installation Completed Date:

Not Reported
Not Reported

Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Not Reported

Not Reported

Pump Installation Report to DWR:

Not Reported

Statute Which Permit Issued Under:

Last Staff Member to Update File:

Not Reported

Not Reported

Water District: 02

 Groundwater Basin Numb:
 00
 Basin Mgmt Dist Numb:
 00

 Principal Meridian:
 S
 Dist from Section Line:
 0 0

 Range:
 0660W
 Township:
 040S

 Section:
 04
 1/4 Section:
 SE

 1/4 1/4:
 NW
 1/4 1/4 1/4:
 Not R

1/4 1/4: 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Not Reported Block Number: Filing Number: Not Reported Not Reported Approval Engineer: Designation Number: Not Reported

Comments: Not Reported Utm_x: 518951.844

Utm_y: 4397726.5 Loc_source: CarteView 2/17/2000

Usage: Domestic

Map ID Direction Distance

Elevation Database EDR ID Number

E22
East CO WELLS COWW216243

1/2 - 1 Mile Higher

Site Name: COLORADO NATIONAL GUARD AGINS/CEV,2

Mailing Address: 660 S ASPEN ST

AURORA, CO 80011 - 9551

Telephone: 3036776308

Water Division:1County Code:3Receipt:0455125BPermit Number:224835Suffix Code:Not ReportedReplacement Code:Not Reported

Valid Well: No Parcel:

Application Date: 01/05/2000
Application Status: Well permit issued
Permit Status: Not Reported
Permit Stat Date: Not Reported
Last Action Updated: Well permit issued
Last Action Date: 04/07/2000

Permit, Denial (AD) or Monitoring Hole Issued: 04/06/2000 Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

39

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Not reported First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: 04/06/2002 Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

0

Cross Reference to Another Well or Record: 037249MH
Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported
Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported
Well ID Number: 00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received:

Contractor's License:

Pump Installer's License:

Not Reported

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

Local Staff Mambar to Linders File:

Staff Mambar to Linders File:

Not Reported

Staff Mambar to Linders File:

SMI

Last Staff Member to Update File: SMJ Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 0

Principal Meridian:SDist from Section Line:500N 325ERange:0660WTownship:040SSection:091/4 Section:NE

 1/4 1/4:
 NE
 1/4 1/4 1/4:
 Not Reported

 Aquifer:
 GW
 2nd Aquifer:
 Not Reported

Sub Division:Not ReportedLot Number:Not ReportedBlock Number:Not ReportedFiling Number:Not ReportedApproval Engineer:MTTDesignation Number:FMPMW-21

Comments: Not Reported Utm_x: 519459.156

Utm_y: 4396965 Loc_source: CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

F23
WNW
CO WELLS COWW155374
1/2 - 1 Mile

Lower

Site Name: AMOCO OIL CO STATION #2174
Mailing Address: 8700 INDIAN CRK PKWY #200
OVERLAND PARK, KS 66210

Telephone: 9133394565

Water Division:1County Code:3Receipt:0368981APermit Number:179436Suffix Code:Not ReportedReplacement Code:Not Reported

Valid Well: Yes Parcel: 0

Application Date: 04/29/1994

Application Status: Well permit issued

Permit Status: Application for permit resubmitted to DWR

Permit Stat Date: 06/15/1994
Last Action Updated: Well permit issued
Last Action Date: 06/28/1994

Permit, Denial (AD) or Monitoring Hole Issued: 06/28/1994
Construction/Test report Received by DWR: 06/15/1994
Well Proposed Yield (Gal/Min): .100000001

Well Proposed Depth (Feet): 37
Proposed Annual Appropriation (Acre Feet): 614

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Not Reported Date Statement of Use Received: Date Amended to Include Animals: Not Reported Permit Expiration Date: 06/28/1996 Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0026
Depth to Base of Last Perforated Casing: 0036

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

0

Cross Reference to Another Well or Record:

Notice of Well Completion Recvd. for Non-trib Aquifer:

Notice of Beneficial Use Recvd. for Non-trib Aquifer:

Well ID Number:

020970MH

Not Reported

Not Reported

00000

Well Construction Completed Date: 07/08/1993
Pump Installation Completed Date: Not Reported
Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

Not Reported

Not Reported

Not Reported

Statute Which Permit Issued Under:

6023

Last Staff Member to Update File: LMD Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00

Principal Meridian:SDist from Section Line:320N 2400WRange:0660WTownship:040SSection:081/4 Section:NW

 1/4 1/4:
 NE
 1/4 1/4 1/4:
 Not Reported

 Aquifer:
 GW
 2nd Aquifer:
 Not Reported

Sub Division:AURORA CENTRETECHLot Number:4Block Number:1Filing Number:12Approval Engineer:DWRDesignation Number:OW-5

Comments: Not Reported Utm_x: 517058.906

Utm_y: 4397018 Loc_source: CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

G24
ENE CO WELLS COWW259998
1/2 - 1 Mile
Higher

Site Name: CAVANAUGH F M
Mailing Address: 492 GALENA

DENVER, CO 80208

Telephone: Not Reported

Water Division:1County Code:3Receipt:9005670Permit Number:5192Suffix Code:Not ReportedReplacement Code:Not Reported

Valid Well: Yes Parcel: 0

Application Date: Not Reported Application Status: Not Reported Permit Status: Not Reported Permit Stat Date: Not Reported

Last Action Updated: Record change. A portion of the file was modified

Last Action Date: 11/21/1994

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: 02/05/1960 Date Statement of Use Received: Not Reported Not Reported Date Amended to Include Animals: Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: 25
Total Depth of Well: 44
Depth to Static Water Level: 12
Ground Surface Elevation: 0
Acres Irrigated: 0
Totaling Flow Meter Reqd., Installed: N

Cross Reference to Another Well or Record:

Not Reported

Notice of Well Completion Recvd. for Non-trib Aquifer:

Not Reported

Not Reported

Not Reported

Not Reported

Not Reported

Well ID Number: 00000
Well Construction Completed Date: Not Reported
Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Not Reported

Last Staff Member to Update File: RAB Water District: 02

Groundwater Basin Numb:00Basin Mgmt Dist Numb:00Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:041/4 Section:SE

1/4 1/4: SE 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Not Reported Not Reported Block Number: Filing Number: Not Reported Approval Engineer: Designation Number: Not Reported

Comments: Not Reported Utm_x: 519356.406

Utm_y: 4397320.5 Loc_source: CarteView 2/17/2000

Usage: Domestic

G25
ENE CO WELLS COWW041660

1/2 - 1 Mile Higher

Site Name: GE CAPITAL MODULAR SPACE

Mailing Address: C/O URS

C/O URS

CINCINNATI, OH 45202

Telephone: 5136513440

Water Division:1County Code:3Receipt:0039715Permit Number:39715Suffix Code:MHReplacement Code:Not ReportedValid Well:NoParcel:0

Application Date: 05/30/2001
Application Status: Abandoned Well
Permit Status: Abandoned Well
Permit Stat Date: 07/25/2001
Last Action Updated: Abandoned Well
Last Action Date: 11/27/2001

Permit, Denial (AD) or Monitoring Hole Issued: 05/31/2001 Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

30

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Not reported First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Not Reported Date Amended to Include Animals: 08/30/2001 Permit Expiration Date: Abandonment Report Received: 07/25/2001 Plugged an Abandoned Date: 07/17/2001 Annual Appropriation in Acre Feet: 0

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

0

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Not Reported Notice of Beneficial Use Recvd. for Non-trib Aguifer: Well ID Number: 00000 Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported Geophysical is Required and Received: No Contractor's License: **AUTH** Not Reported Pump Installer's License:

Contractor's License:

Pump Installer's License:

Not Reported

Pump Installation Report to DWR:

Not Reported

Statute Which Permit Issued Under:

Not Reported

Not Reported

Last Staff Member to Update File: RAB Water District: 02

Groundwater Basin Numb:00Basin Mgmt Dist Numb:00Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:041/4 Section:SE

1/4 1/4 1/4: Not Reported 1/4 1/4: SE Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Not Reported Not Reported Approval Engineer: Designation Number:

Comments: 15 WELLS. 13 plugged 7/18/01

Utm_x: 519356.406

Utm_y: 4397320.5 Loc_source: CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

G26
ENE CO WELLS COWW026121
1/2 - 1 Mile

Site Name: GE CAPITAL

Higher

Mailing Address: %GROUND EXPLORING CO INC

%GROUND EXPLORING CO INC

GOLDEN, CO 80403

Telephone: 3034209977

Water Division:1County Code:3Receipt:0026368Permit Number:26368Suffix Code:MHReplacement Code:Not Reported

Valid Well: No Parcel: 0

Application Date: 08/23/1995

Application Status: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Permit Status: Not Reported Permit Stat Date: Not Reported

Last Action Updated: Record change. A portion of the file was modified

Last Action Date: 09/11/1995

Permit, Denial (AD) or Monitoring Hole Issued: 08/23/1995 Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type:

Well Type:

First Beneficial Use Date:

Not reported

Exempt

Not Reported

Date Statement of Use Received:

Date Amended to Include Animals:

Permit Expiration Date:

Abandonment Report Received:

Plugged an Abandoned Date:

Not Reported

Not Reported

Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

N

Cross Reference to Another Well or Record:
Notice of Well Completion Recvd. for Non-trib Aquifer:
Not Reported
Notice of Beneficial Use Recvd. for Non-trib Aquifer:
Well ID Number:

Not Reported
Not Reported
Not Reported
Not Reported
Not Reported

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received:

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

No

No

No

Not Reported

Not Reported

Last Staff Member to Update File: JLV Water District: 02

Groundwater Basin Numb:00Basin Mgmt Dist Numb:00Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:041/4 Section:SE

SE Not Reported 1/4 1/4: 1/4 1/4 1/4: Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Not Reported Approval Engineer: Designation Number: Not Reported

Comments: Not Reported Utm_x: 519356.406

Utm_y: 4397320.5 Loc_source: CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

1/2 - 1 Mile
Higher
Site Name: COLORADO AIR NATIONAL GUARD

C/O PACIFIC WESTERN TECH C/O PACIFIC WESTERN TECH

GOLDEN, CO 80401

Telephone: 3032780660

Mailing Address:

Water Division:1County Code:3Receipt:0021877Permit Number:21877Suffix Code:MHReplacement Code:Not Reported

Valid Well: No Parcel: 0

Application Date: 11/11/1993

Application Status: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Permit Status: Not Reported Permit Stat Date: Not Reported

Last Action Updated: Record change. A portion of the file was modified

CO WELLS

COWW020403

Last Action Date: 11/19/1993
Permit, Denial (AD) or Monitoring Hole Issued: 11/15/1993
Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

O Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: 02/15/1994 Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

N

Cross Reference to Another Well or Record:
Notice of Well Completion Recvd. for Non-trib Aquifer:
Notice of Beneficial Use Recvd. for Non-trib Aquifer:
Well ID Number:
Well Construction Completed Date:
Not Reported
Not Reported
00000
Not Reported

Pump Installation Completed Date:

Not Reported

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

AUTH

Not Reported

Not Reported

Not Reported

Last Staff Member to Update File: JLV Water District: 02

Groundwater Basin Numb:00Basin Mgmt Dist Numb:00Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:091/4 Section:SE

Not Reported 1/4 1/4: NE 1/4 1/4 1/4: Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Approval Engineer: Not Reported **Designation Number:** Not Reported

Comments: Not Reported Utm_x: 519357.313

 Utm_y:
 4396113
 Loc_source:
 CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

ESE 1/2 - 1 Mile Higher

CO WELLS COWW003579

Site Name: US AIR FORCE

Mailing Address: 2D COMMUNICATIONS SQADRON

BUCKLEY ANGB, CO 80011

Telephone: Not Reported

Water Division:1County Code:3Receipt:0006616Permit Number:25395Suffix Code:FReplacement Code:Not Reported

Valid Well: No Parcel:

Application Date: 05/14/1981

Application Status: Expired well permit Permit Status: Expired well permit Permit Stat Date: 07/17/1982

Last Action Updated: Expired well permit Last Action Date: 09/13/1988

Permit, Denial (AD) or Monitoring Hole Issued: 07/17/1981 Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Non-exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Not Reported Date Amended to Include Animals: Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

N

Cross Reference to Another Well or Record:
Notice of Well Completion Recvd. for Non-trib Aquifer:
Notice of Beneficial Use Recvd. for Non-trib Aquifer:
Well ID Number:
Well Construction Completed Date:
Pump Installation Completed Date:
Geophysical is Required and Received:
Not Reported
Not Reported
Not Reported
Not Reported

Geophysical is Required and Received: No Contractor's License: LIC

 Pump Installer's License:
 Not Reported

 Pump Installation Report to DWR:
 Not Reported

 Statute Which Permit Issued Under:
 Not Reported

 Last Staff Member to Update File:
 Not Reported

Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00 Principal Meridian: S Dist from Section Line: 0 0 Range: 0660W Township: 040S SE Section: 09 1/4 Section: 1/4 1/4: NE 1/4 1/4 1/4: Not Reported

Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Approval Engineer: Not Reported **Designation Number:** SEE 26896-F

Comments: Not Reported Utm_x: 519357.313

 Utm_y:
 4396113
 Loc_source:
 CarteView 2/17/2000

Usage: Q

Map ID Direction Distance

Elevation Database EDR ID Number

H29
ESE CO WELLS COWW035265

1/2 - 1 Mile Higher

Site Name: BUCKLEY AIR NATIONAL GUARD BASE

Mailing Address: % RADIAN INTERNATIONAL % RADIAN INTERNATIONAL

DENVER, CO 80202

Telephone: 3032920800

Water Division:1County Code:3Receipt:0034074Permit Number:34074Suffix Code:MHReplacement Code:Not Reported

Valid Well: No Parcel: 0

Application Date: 07/29/1998

Application Status: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Permit Status: Not Reported Permit Stat Date: Not Reported

Last Action Updated: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Last Action Date: 08/04/1998

Permit, Denial (AD) or Monitoring Hole Issued: 07/29/1998
Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

60

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: 10/29/1998 Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Regd., Installed:

0

Cross Reference to Another Well or Record:
Notice of Well Completion Recvd. for Non-trib Aquifer:
Notice of Beneficial Use Recvd. for Non-trib Aquifer:
Well ID Number:
Well Construction Completed Date:
Pump Installation Completed Date:
Not Reported
Not Reported
Not Reported
Not Reported

Geophysical is Required and Received:

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

No
No
No
No
Reported
Not Reported
Not Reported

Last Staff Member to Update File: KMG Water District: 02

 Groundwater Basin Numb:
 00
 Basin Mgmt Dist Numb:
 00

 Principal Meridian:
 S
 Dist from Section Line:
 0 0

 Range:
 0660W
 Township:
 040S

 Section:
 09
 1/4 Section:
 SE

1/4 1/4: NE 1/4 1/4: Not Reported

GW 2nd Aquifer: Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Not Reported Approval Engineer: Designation Number: Not Reported

Comments: Not Reported Utm_x: 519357.313

Utm_y: 4396113 Loc_source: CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

H30
ESE CO WELLS COWW084155

1/2 - 1 Mile Higher

Site Name: US AIR FORCE

Mailing Address: 2D COMMUNICATION SQUADRON

BUCKLEY ANGB, CO 80011

Telephone: Not Reported

Water Division:1County Code:3Receipt:0238115Permit Number:26896Suffix Code:FReplacement Code:Not Reported

Valid Well: No Parcel: 0

Application Date: 07/25/1983

Application Status: Canceled well permit. Code and date also entered in status and date fields Permit Status: Canceled well permit. Code and date also entered in status and date fields

Permit Stat Date: 10/13/1984

Last Action Updated: Canceled well permit. Code and date also entered in status and date fields

Last Action Date: 02/07/1991

Permit, Denial (AD) or Monitoring Hole Issued: 10/13/1983
Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Non-exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: Not Reported Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date:

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: 0 Total Depth of Well: 0 Depth to Static Water Level: 0 0 Ground Surface Elevation: 0 Acres Irrigated: Totaling Flow Meter Reqd., Installed: Ν 032059F Cross Reference to Another Well or Record: Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported

Notice of Beneficial Use Recvd. for Non-trib Aquifer:

Well ID Number:

Well Construction Completed Date:

Not Reported
00000

Not Reported

Pump Installation Completed Date: Not Reported Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

Not Reported

Not Reported

Not Reported

Statute Which Permit Issued Under: Not Reported Last Staff Member to Update File: Not Reported

Water District: 02

00 Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: Principal Meridian: Dist from Section Line: 0 0 040S Range: 0660W Township: Section: 09 1/4 Section: SE

1/4 1/4: NE 1/4 1/4 1/4: Not Reported Not Reported Aquifer: GW 2nd Aquifer: Sub Division: Not Reported Lot Number: Not Reported Not Reported Block Number: Filing Number: Not Reported Approval Engineer: Not Reported Designation Number: SEE 32059-F

Comments: Not Reported 519357.313 Utm_x:

CarteView 2/17/2000 4396113 Loc_source: Utm_y:

Industrial Usage:

131

NNE 1/2 - 1 Mile Lower

Site Name:

Mailing Address: 5950 S WILLOW DR STE 310

ERM-ROCKY MTN

ENGLEWOOD, CO 80111

Telephone: Not Reported

Water Division: County Code: 3 0016874 Receipt: Permit Number: 16874 Suffix Code: MH Replacement Code: Not Reported

Valid Well: No Parcel:

10/02/1990 Application Date:

Monitoring hole notice of construction. File number and date entered in permit number and permit date fields Application Status:

Permit Status: Not Reported Permit Stat Date: Not Reported

Monitoring hole notice of construction. File number and date entered in permit number and permit date fields Last Action Updated:

10/03/1990 Last Action Date:

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Not Reported Construction/Test report Received by DWR:

Well Proposed Yield (Gal/Min): 0 Well Proposed Depth (Feet): 0 Proposed Annual Appropriation (Acre Feet): 0

Well Application Type: Not reported Well Type: Non-exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Not Reported Plugged an Abandoned Date:

Annual Appropriation in Acre Feet: 0 Depth to Top of 1st Perforated Casing: 0000 Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: Total Depth of Well: 0 Depth to Static Water Level: 0 Ground Surface Elevation: 0 Acres Irrigated: 0 Ν

Totaling Flow Meter Reqd., Installed:

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aguifer: Not Reported **CO WELLS**

COWW013872

Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported

Well ID Number: 00000

Well Construction Completed Date: Not Reported Not Reported Pump Installation Completed Date:

Geophysical is Required and Received: No Contractor's License: LIC

Pump Installer's License: Not Reported Pump Installation Report to DWR: Not Reported Not Reported Statute Which Permit Issued Under: Last Staff Member to Update File: Not Reported 02

Water District:

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00 Principal Meridian: S Dist from Section Line: 00 Township: Range: 0660W 040S

04 1/4 Section: Not Reported Section: Not Reported 1/4 1/4: Not Reported 1/4 1/4 1/4: Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Not Reported Not Reported Block Number: Filing Number: Not Reported Approval Engineer: **Designation Number:** Not Reported

Comments: Not Reported Utm_x: 518748.25

4397926.5 Utm_y:

Usage: Q

Lower

CarteView 2/17/2000

132 NNE **CO WELLS** COWW030954 1/2 - 1 Mile

Loc_source:

HARRIS VICTORIA S Site Name: 17400 E 14TH DR Mailing Address: AURORA, CO 80011

Telephone: Not Reported

County Code: Water Division: Permit Number: 202221 Receipt: 0030456 Suffix Code: Not Reported Replacement Code: Not Reported Valid Well: Parcel:

Yes Application Date: 04/17/1997 **Application Status:** Well permit issued Permit Status: Not Reported Permit Stat Date: Not Reported

Last Action Updated: Record change. A portion of the file was modified

Last Action Date: 04/18/1997

Permit, Denial (AD) or Monitoring Hole Issued: 04/17/1997 Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min): 0 Well Proposed Depth (Feet): 0 Proposed Annual Appropriation (Acre Feet): 0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: 08/10/1954 Date Statement of Use Received: Not Reported Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0 Depth to Top of 1st Perforated Casing: 0000 0000 Depth to Base of Last Perforated Casing: Water Court Case Number: **CWCB 362**

Yield in Gallons Per Minute: 20 Total Depth of Well: 465 Depth to Static Water Level: 0 Ground Surface Elevation: 0 Acres Irrigated: 0 Totaling Flow Meter Reqd., Installed: Ν

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aguifer: Not Reported Well ID Number: 00000 Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License: Not Reported Pump Installer's License: Pump Installation Report to DWR: Not Reported Statute Which Permit Issued Under: Not Reported

RAB Last Staff Member to Update File: Water District: 01

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00 Principal Meridian: Dist from Section Line: 0 0 Range: 0660W Township: 040S

Section: 04 1/4 Section: Not Reported 1/4 1/4 1/4: Not Reported 1/4 1/4: Not Reported Aquifer: 2nd Aquifer: Not Reported GW Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported

Not Reported Approval Engineer:

Comments: Not Reported 518748.25 Utm_x:

4397926.5 CarteView 2/17/2000 Utm y: Loc_source:

LR

Usage: **Domestic**

J33 CO WELLS COWW261897 North

Designation Number:

#1

1/2 - 1 Mile Lower

> Site Name: **BRANDT DON** Mailing Address: 491 FULTON ST. AURORA, CO 80010

Telephone: Not Reported

Water Division: County Code: Receipt: 9007612 Permit Number: 88209

Suffix Code: Not Reported Replacement Code: Not Reported Valid Well: Parcel: Yes

Application Date: Not Reported Application Status: Not Reported Not Reported Permit Status: Not Reported Permit Stat Date: Last Action Updated: Not Reported Last Action Date: Not Reported

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min): 0 Well Proposed Depth (Feet): 0 Proposed Annual Appropriation (Acre Feet):

Well Application Type: Not reported Well Type: Exempt 03/22/1978 First Beneficial Use Date: Date Statement of Use Received: Not Reported

Date Amended to Include Animals:

Permit Expiration Date:

Abandonment Report Received:

Plugged an Abandoned Date:

Not Reported

Not Reported

Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: Not Reported 00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Not Reported
Pump Installation Report to DWR:

Not Reported
Statute Which Permit Issued Under:
Last Staff Member to Update File:

Not Reported
Not Reported

Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00

 Principal Meridian:
 S
 Dist from Section Line:
 3030S 1725W

 Range:
 0660W
 Township:
 040S

 Section:
 04
 1/4 Section:
 NW

1/4 1/4: SE 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Not Reported Block Number: Filing Number: Not Reported Approval Engineer: Not Reported Designation Number: Not Reported

Comments: Not Reported Utm_x: 518466.688

Utm_y: 4398038.5 Loc_source: CarteView 2/17/2000

Usage: Domestic

F34
West CO WELLS COWW019360

1/2 - 1 Mile Lower

Site Name: AMOCO OIL COMPANY
Mailing Address: C/O RUST ENVIRONMENT
C/O RUST ENVIRONMENT

ENGLEWOOD, CO 80111 - 5123

Telephone: 3036946660

Water Division:1County Code:3Receipt:0020970Permit Number:20969Suffix Code:MHReplacement Code:Not Reported

Valid Well: No Parcel: 0

Application Date: 06/24/1993

Application Status: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Permit Status: Not Reported Permit Stat Date: Not Reported

Last Action Updated: Record change. A portion of the file was modified

Last Action Date: 11/09/2001

Permit, Denial (AD) or Monitoring Hole Issued: 07/01/1993
Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Permit Expiration Date: 07/01/1994 Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: Total Depth of Well: 0 Depth to Static Water Level: 0 Ground Surface Elevation: 0 Acres Irrigated: 0 Totaling Flow Meter Reqd., Installed: Ν Cross Reference to Another Well or Record: 178391 Notice of Well Completion Recvd. for Non-trib Aguifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: 00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received:

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

No

No

No

No

No

Reported

Not Reported

Last Staff Member to Update File: RAB Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00
Principal Meridian: S Dist from Section Line: 0 0
Range: 0660W Township: 040S
Section: 08 1/4 Section: NW

1/4 1/4: NE 1/4 1/4 1/4: Not Reported Not Reported Aquifer: GW 2nd Aquifer: Lot Number: Not Reported Sub Division: Not Reported Not Reported Block Number: Filing Number: Not Reported Approval Engineer: Not Reported **Designation Number:** Not Reported

Comments: Not Reported Utm_x: 516936.25

Utm_y: 4396915 Loc_source: CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

F35
West CO WELLS COWW261251
1/2 - 1 Mile

Lower

Site Name: ALLARD TRAN P
Mailing Address: 1316 HAVANA
ALIBORA CO 2001

AURORA, CO 80010

Telephone: Not Reported

Water Division: 1 County Code: 3
Receipt: 9006963 Permit Number: 44512

Suffix Code: Not Reported Replacement Code: Not Reported

Valid Well: Yes Parcel:

Application Date: Not Reported
Application Status: Not Reported
Permit Status: Not Reported
Permit Stat Date: Not Reported
Last Action Updated: Not Reported
Last Action Date: Not Reported

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type:

Well Type:

First Beneficial Use Date:

Date Statement of Use Received:

Date Amended to Include Animals:

Permit Expiration Date:

Not Reported

Not Reported

Not Reported

Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported Annual Appropriation in Acre Feet: 0

Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Cross Reference to Another Well or Record:
Not Reported
Notice of Well Completion Recvd. for Non-trib Aquifer:
Not Reported

Pump Installation Completed Date:
Geophysical is Required and Received:
No
Contractor's License:
Not Reported
Pump Installer's License:
Not Reported
Pump Installation Report to DWR:
Not Reported
Statute Which Permit Issued Under:
Not Reported
Last Staff Member to Update File:
Not Reported
Water District:
02

Groundwater Basin Numb:00Basin Mgmt Dist Numb:00Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:081/4 Section:NW

1/4 1/4: NE 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Not Reported Sub Division: Lot Number: Not Reported Not Reported Block Number: Filing Number: Not Reported Approval Engineer: Not Reported **Designation Number:** Not Reported

Comments: Not Reported Utm_x: 516936.25

Utm_y: 4396915 Loc_source: CarteView 2/17/2000

Usage: Domestic

Map ID Direction Distance

Elevation Database EDR ID Number

36
ESE CO WELLS COWW005762

1/2 - 1 Mile Higher

Site Name: US AIR FORCE

Mailing Address: 20 COMMUNICATION SQUADRON

BUCKLEY ANGB, CO 80011

Telephone: 3033409238

Water Division:1County Code:3Receipt:0009541Permit Number:32059Suffix Code:FReplacement Code:Not Reported

Valid Well: Yes Parcel:

Application Date: 01/12/1984

Application Status: Statement of beneficial use accepted Permit Status: Statement of beneficial use accepted

Permit Stat Date: 01/26/1998

Last Action Updated: Statement of beneficial use accepted

Last Action Date: 01/28/1998

Permit, Denial (AD) or Monitoring Hole Issued: 07/28/1987 Construction/Test report Received by DWR: 12/12/1983

Well Proposed Yield (Gal/Min):0Well Proposed Depth (Feet):0Proposed Annual Appropriation (Acre Feet):0

Well Application Type: Not reported Well Type: Non-exempt 11/14/1983 First Beneficial Use Date: Date Statement of Use Received: 01/12/1984 Date Amended to Include Animals: Not Reported Permit Expiration Date: 07/28/1988 Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0900
Depth to Base of Last Perforated Casing: -999

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

Cross Reference to Another Well or Record:

0
026896F

Notice of Well Completion Recvd. for Non-trib Aquifer:
Notice of Beneficial Use Recvd. for Non-trib Aquifer:
Well ID Number:
Well Construction Completed Date:
Pump Installation Completed Date:
Geophysical is Required and Received:
Not Reported
Not Repo

Geophysical is Required and Received:

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

Last Staff Member to Update File:

Water District:

No

949

12/12/1983

12/12/1983

SMJ

Water District:

02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00

Principal Meridian:SDist from Section Line:2690N 90ERange:0660WTownship:040SSection:091/4 Section:SE

 1/4 1/4:
 NE
 1/4 1/4:
 Not Reported

 Aquifer:
 KA
 2nd Aquifer:
 Not Reported

Sub Division:Not ReportedLot Number:Not ReportedBlock Number:Not ReportedFiling Number:Not ReportedApproval Engineer:KVHDesignation Number:Not Reported

Comments: Not Reported Utm_x: 519530.906

Utm_y: 4396298 Loc_source: CarteView 2/17/2000

Usage: Q, Permit was issued persuant to Senate bill 5 (137) (4)

K37 NW CO WELLS COWW259732

1/2 - 1 Mile Lower

Site Name: HUDSON J C
Mailing Address: 970 JEANETTE ST
DENVER 8, CO 80208

Telephone: Not Reported

Water Division:1County Code:3Receipt:9005403Permit Number:1404Suffix Code:Not ReportedReplacement Code:Not Reported

Valid Well: Yes Parcel:

Application Date: Not Reported
Application Status: Not Reported
Permit Status: Not Reported
Permit Stat Date: Not Reported
Last Action Updated: Not Reported
Last Action Date: Not Reported

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

O Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: 06/18/1958 Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Not Reported Permit Expiration Date: Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

15

566

235

Ground Surface Elevation:

0

N

Cross Reference to Another Well or Record:

Not Reported

Notice of Well Completion Recvd. for Non-trib Aquifer:

Not Reported

Not Reported

Not Reported

Not Reported

Not Reported

Not Reported

O0000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

Not Reported

Not Reported

Not Reported

Not Reported

Not Reported

Not Reported

Last Staff Member to Update File: Not Reported

Water District:

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00 Principal Meridian: Dist from Section Line: 0 0 0660W 040S Range: Township: Section: 05 1/4 Section: SE 1/4 1/4: NW 1/4 1/4 1/4:

Not Reported Aquifer: GW 2nd Aquifer: Not Reported Not Reported Lot Number: Not Reported Sub Division: Not Reported Filing Number: Block Number: Not Reported Not Reported Approval Engineer: **Designation Number:** Not Reported

Comments: Not Reported Utm_x: 517337.375

Utm_y: 4397723 Loc_source: CarteView 2/17/2000

Usage: Domestic

K38
NW
CO WELLS COWW260519
1/2 - 1 Mile

1/2 - 1 Mile Lower

Site Name: TEST JOHN L
Mailing Address: 1000 JEANETTE ST

AURORA, CO 80010

Telephone: Not Reported

Water Division:1County Code:3Receipt:9006194Permit Number:15968Suffix Code:Not ReportedReplacement Code:Not Reported

Valid Well: Yes Parcel: 0

Application Date: Not Reported
Application Status: Not Reported
Permit Status: Not Reported
Permit Stat Date: Not Reported
Last Action Updated: Not Reported
Last Action Date: Not Reported

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: 10
Total Depth of Well: 75
Depth to Static Water Level: 0
Ground Surface Elevation: 0
Acres Irrigated: 0
Totaling Flow Meter Reqd., Installed: N

Cross Reference to Another Well or Record:

Not Reported

Notice of Well Completion Recvd. for Non-trib Aquifer:

Not Reported

Not Reported

Not Reported

Not Reported

Not Reported

Well ID Number: 00000
Well Construction Completed Date: Not Reported
Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Not Reported

Not Reported

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

Last Staff Member to Update File:

Not Reported

Not Reported

Water District: 02

Groundwater Basin Numb:00Basin Mgmt Dist Numb:00Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:051/4 Section:SE

1/4 1/4: NW 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Not Reported Not Reported Block Number: Filing Number: Not Reported Approval Engineer: Designation Number: Not Reported

Comments: Not Reported Utm_x: 517337.375

Utm_y: 4397723 Loc_source: CarteView 2/17/2000

Usage: Domestic

L39
North
CO WELLS COWW261509
1/2 - 1 Mile

Lower

Site Name: CARREL GARNET I (BARNETT)

Mailing Address: 17200 E 13TH AVE

AURORA, CO 80010

Telephone: Not Reported

Water Division:1County Code:3Receipt:9007221Permit Number:62023Suffix Code:Not ReportedReplacement Code:Not Reported

Valid Well: Yes Parcel: 0

Application Date: Not Reported Application Status: Not Reported Permit Status: Not Reported Permit Stat Date: Not Reported Last Action Updated: Not Reported Last Action Date: Not Reported

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min): 0
Well Proposed Depth (Feet): 0
Proposed Annual Appropriation (Acre Feet): 0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: 09/01/1952 Not Reported Date Statement of Use Received: Date Amended to Include Animals: Not Reported Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: 15

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

0

N

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: Not Reported 00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Not Reported

Not Reported

Not Reported

Not Reported

Not Reported

Statute Which Permit Issued Under:

Last Staff Member to Update File:

Not Reported

Not Reported

Water District: 02

Domestic

Groundwater Basin Numb:00Basin Mgmt Dist Numb:00Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:041/4 Section:NW

1/4 1/4: SW 1/4 1/4 1/4: Not Reported Not Reported Aquifer: GW 2nd Aquifer: Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Approval Engineer: Not Reported Designation Number: Not Reported

Comments: Not Reported Utm_x: 518141.938

Utm_y: 4398130.5 Loc_source: CarteView 2/17/2000

· ·

L40
North CO WELLS COWW260748

Parcel:

1/2 - 1 Mile Lower

Usage:

Site Name: RUSH EDWARD L Mailing Address: 17150 E 13TH

AURORA, CO 80010

Telephone: Not Reported

Water Division:1County Code:3Receipt:9006425Permit Number:20581Suffix Code:Not ReportedReplacement Code:Not Reported

Valid Well: Yes

Application Date: Not Reported Application Status: Not Reported Permit Status: Not Reported Permit Stat Date: Not Reported Last Action Updated: Not Reported Last Action Date: Not Reported

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type:

Well Type:

First Beneficial Use Date:

Date Statement of Use Received:

Date Amended to Include Animals:

Not reported

Exempt

Not Reported

Not Reported

Not Reported

Permit Expiration Date:

Abandonment Report Received:

Plugged an Abandoned Date:

Not Reported

Not Reported

Not Reported

Annual Appropriation in Acre Feet:

Depth to Top of 1st Perforated Casing:

Depth to Base of Last Perforated Casing:

0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

18

300

0

0

N

Cross Reference to Another Well or Record:

Not Reported
Notice of Well Completion Recvd. for Non-trib Aquifer:
Not Reported

Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Not Reported

Not Reported

Pump Installation Report to DWR:

Not Reported

Statute Which Permit Issued Under:

Last Staff Member to Update File:

Not Reported

Not Reported

Water District: 02

00 Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: Principal Meridian: Dist from Section Line: 0 0 Range: 0660W Township: 040S Section: 04 1/4 Section: NW 1/4 1/4: SW 1/4 1/4 1/4: Not Reported

Aquifer: GW 2nd Aquifer: Not Reported Not Reported Sub Division: Lot Number: Not Reported Block Number: Not Reported Not Reported Filing Number: Approval Engineer: Not Reported **Designation Number:** Not Reported

Comments: Not Reported Utm_x: 518141.938

Utm_y: 4398130.5 Loc_source: CarteView 2/17/2000

Usage: Domestic

J41
NNE
CO WELLS COWW260182
1/2 - 1 Mile

1/2 - 1 N Lower

Site Name: BLUM O J
Mailing Address: 1250 QUAIL ST
AURORA, CO 80010

Telephone: Not Reported

Water Division:1County Code:3Receipt:9005854Permit Number:8907Suffix Code:Not ReportedReplacement Code:Not Reported

Valid Well: Yes Parcel:

Application Date: Not Reported Application Status: Not Reported Permit Status: Not Reported Permit Stat Date: Not Reported Last Action Updated: Not Reported Last Action Date: Not Reported

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min): 0 Well Proposed Depth (Feet): 0 Proposed Annual Appropriation (Acre Feet): 0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: 06/17/1961 Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: Depth to Top of 1st Perforated Casing: 0000 Depth to Base of Last Perforated Casing: 0000

Not Reported Water Court Case Number:

Yield in Gallons Per Minute: 13 Total Depth of Well: 533 Depth to Static Water Level: 210 Ground Surface Elevation: 0 Acres Irrigated: 0 Totaling Flow Meter Regd., Installed: Ν

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: 00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License: Not Reported Pump Installer's License: Not Reported Pump Installation Report to DWR: Not Reported Statute Which Permit Issued Under: Not Reported Not Reported Last Staff Member to Update File: 02

Water District:

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00 Principal Meridian: Dist from Section Line: 0 0 0660W Township: 040S Range: 1/4 Section: NW Section: 04

1/4 1/4: SE 1/4 1/4 1/4: Not Reported Aquifer: 2nd Aquifer: Not Reported GW Sub Division: Not Reported Lot Number: Not Reported Not Reported Block Number: Filing Number: Not Reported Approval Engineer: Not Reported **Designation Number:** Not Reported

Comments: Not Reported

Utm_x: 518545.844

Utm_y: 4398132 Loc_source: CarteView 2/17/2000

Usage: Domestic

J42 NNE **CO WELLS** COWW260324 1/2 - 1 Mile

Lower Site Name: ABRAHAMSEN M F

Mailing Address:

325 MOLINE ST AURORA, CO 80010

Telephone: Not Reported

Water Division: County Code: 3 9005998 Permit Number: Receipt:

12430 Suffix Code: Not Reported Replacement Code: Not Reported

Valid Well: Yes Parcel:

Not Reported Application Date: **Application Status:** Not Reported Permit Status: Not Reported Not Reported Permit Stat Date: Last Action Updated: Not Reported Last Action Date: Not Reported

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min): 0 Well Proposed Depth (Feet): 0 Proposed Annual Appropriation (Acre Feet): 0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: 08/08/1962 Not Reported Date Statement of Use Received: Date Amended to Include Animals: Not Reported Permit Expiration Date: Not Reported

Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date: Annual Appropriation in Acre Feet: 0

Depth to Top of 1st Perforated Casing: 0000 Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: 25 Total Depth of Well: 562 Depth to Static Water Level: 295 Ground Surface Elevation: 0 Acres Irrigated: 0 Totaling Flow Meter Reqd., Installed: Ν

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aguifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: 00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported No

Geophysical is Required and Received:

Contractor's License: Not Reported Pump Installer's License: Not Reported Pump Installation Report to DWR: Not Reported Statute Which Permit Issued Under: Not Reported Last Staff Member to Update File: Not Reported Water District: 02

Basin Mgmt Dist Numb: 00 Groundwater Basin Numb: 00 Principal Meridian: Dist from Section Line: 00 Range: 0660W Township: 040S Section: 04 1/4 Section: NW

SE 1/4 1/4: 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Approval Engineer: Not Reported Designation Number: Not Reported

Not Reported Comments: 518545.844 Utm_x:

4398132 CarteView 2/17/2000 Utm_y: Loc_source:

Domestic Usage:

Map ID Direction Distance

Database EDR ID Number Elevation

J43 NNE **CO WELLS** COWW083907

1/2 - 1 Mile Lower

> Site Name: HAWTHORNE D Not Reported Mailing Address:

AURORA, CO 80017

Telephone: Not Reported

Water Division: County Code: 3 Receipt: 0237788 Permit Number: 132238 Suffix Code: Not Reported Replacement Code: Not Reported Parcel: Valid Well: Nο

Application Date: 07/21/1983 Application Status: Well permit issued Not Reported Permit Status: Permit Stat Date: Not Reported Last Action Updated: Not Reported 09/15/1986 Last Action Date:

Permit, Denial (AD) or Monitoring Hole Issued: 08/24/1983 Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min): 0 Well Proposed Depth (Feet): 0 Proposed Annual Appropriation (Acre Feet):

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0 Depth to Top of 1st Perforated Casing: 0000 Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: Total Depth of Well: 0 Depth to Static Water Level: 0 0 Ground Surface Elevation: 0 Acres Irrigated: Totaling Flow Meter Reqd., Installed: Ν

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Well ID Number: 00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported Geophysical is Required and Received: No

Contractor's License: LIC Pump Installer's License: Not Reported Pump Installation Report to DWR:

Not Reported Statute Which Permit Issued Under: Not Reported Not Reported Last Staff Member to Update File: 02

Water District:

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00 Principal Meridian: Dist from Section Line: 0 0 0660W 040S Range: Township: 1/4 Section: NW Section: 04

1/4 1/4: SE 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported

Sub Division:Not ReportedLot Number:Not ReportedBlock Number:Not ReportedFiling Number:Not ReportedApproval Engineer:Not ReportedDesignation Number:Not Reported

Comments: Not Reported Utm_x: 518545.844 Utm_y: 4398132

tm_y: 4398132 Loc_source: CarteView 2/17/2000

Usage: Domestic, Livestock

J44
NNE
CO WELLS COWW261031

1/2 - 1 Mile Lower

Site Name: LOMBARDI WILLIAM Mailing Address: 405 OAKLAND

AURORA, CO 80010

Telephone: Not Reported

Water Division:1County Code:3Receipt:9006741Permit Number:32174Suffix Code:Not ReportedReplacement Code:Not Reported

Valid Well: Yes Parcel:

Application Date: Not Reported Application Status: Not Reported Permit Status: Not Reported Permit Stat Date: Not Reported Last Action Updated: Not Reported Last Action Date: 04/04/1991

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

O Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: 09/22/1967 Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Not Reported Permit Expiration Date: Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Cross Reference to Another Well or Record:
Notice of Well Completion Recvd. for Non-trib Aquifer:
Notice of Beneficial Use Recvd. for Non-trib Aquifer:
Well ID Number:
Not Reported
Not Reported
Not Reported
00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

Not Reported

Not Reported

Not Reported

Not Reported

Not Reported

Not Reported

Last Staff Member to Update File: Not Reported

Water District:

Groundwater Basin Numb:00Basin Mgmt Dist Numb:00Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:041/4 Section:NW

1/4 1/4: SE 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Not Reported Block Number: Filing Number: Not Reported Not Reported Approval Engineer: **Designation Number:** Not Reported

Comments: Not Reported Utm_x: 518545.844

Utm_y: 4398132 Loc_source: CarteView 2/17/2000

Usage: Domestic

Lower

L45
North
1/2 - 1 Mile

CO WELLS COWW261682

Site Name: WESTLAKE DONALD J Mailing Address: 1180 BUCKLEY RD

AURORA, CO 80010

Telephone: Not Reported

Water Division:1County Code:3Receipt:9007393Permit Number:74848Suffix Code:Not ReportedReplacement Code:Not Reported

Valid Well: Yes Parcel: 0

Application Date: Not Reported
Application Status: Not Reported
Permit Status: Not Reported
Permit Stat Date: Not Reported
Last Action Updated: Not Reported
Last Action Date: Not Reported

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: 09/20/1952 Date Statement of Use Received: Not Reported Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Cross Reference to Another Well or Record:

Not Reported
Notice of Well Completion Recvd. for Non-trib Aquifer:

Not Reported
Not Reported
Not Reported
Not Reported

Well ID Number: 00000
Well Construction Completed Date: Not Reported
Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Not Reported

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

Last Staff Member to Update File:

Not Reported

Not Reported

Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00

Principal Meridian:SDist from Section Line:1983N 132WRange:0660WTownship:040SSection:041/4 Section:NW

1/4 1/4: SW 1/4 1/4 1/4: Not Reported Not Reported Aquifer: GW 2nd Aquifer: Sub Division: Not Reported Lot Number: Not Reported Not Reported Not Reported Block Number: Filing Number: Not Reported Designation Number: Not Reported

Approval Engineer: Not Reported Comments: Not Reported Utm_x: 517980.219

Utm_y: 4398135.5 Loc_source: CarteView 2/17/2000

Usage: Domestic

46
NE CO WELLS COWW048277
1/2 - 1 Mile

Lower
Site Name: AURORA CITY OF

AURORA, CO 80010

9859 E 16TH

Telephone: Not Reported

Mailing Address:

Water Division: 1 County Code: 3
Receipt: 0073886 Permit Number: 21473
Suffix Code: F Replacement Code: Not Reported

Valid Well: No Parcel: 0

Application Date: 05/24/1976
Application Status: Expired well permit
Permit Status: Expired well permit
Permit Stat Date: 09/14/1977

Last Action Updated: Expired well permit

Last Action Date: 08/12/1988

Permit, Denial (AD) or Monitoring Hole Issued: 09/14/1976
Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Non-exempt First Beneficial Use Date: Not Reported Not Reported Date Statement of Use Received: Date Amended to Include Animals: Not Reported Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: 0

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

0

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: Not Reported 00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Not Reported

Not Reported

Not Reported

Not Reported

Not Reported

Not Reported

Statute Which Permit Issued Under:

Last Staff Member to Update File:

Not Reported

Not Reported

Water District: 02

Groundwater Basin Numb:00Basin Mgmt Dist Numb:00Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:041/4 Section:SE

1/4 1/4: NE 1/4 1/4 1/4: Not Reported Not Reported Aquifer: GW 2nd Aquifer: Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Approval Engineer: Not Reported Designation Number: Not Reported

Comments: Not Reported

Utm_x: 519355

Utm_y: 4397728 Loc_source: CarteView 2/17/2000

Usage: Crop Irrigation

M47
East CO WELLS COWW038595

1/2 - 1 Mile Higher

Site Name:

Mailing Address:

BUCKLEY AIR NATIONAL GUARD

WERM ROCKY MOUNTAIN

WERM ROCKY MOUNTAIN

GRNWD VLG, CO 80111

Telephone: 3037415050

Water Division:1County Code:3Receipt:0037248Permit Number:37248Suffix Code:MHReplacement Code:Not Reported

Valid Well: No Parcel: 0

Application Date: 10/29/1999

Application Status: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Permit Status: Not Reported Permit Stat Date: Not Reported

Last Action Updated: Record change. A portion of the file was modified

Last Action Date: 04/07/2000

Permit, Denial (AD) or Monitoring Hole Issued: 11/01/1999
Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

100

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type:

Well Type:

First Beneficial Use Date:

Date Statement of Use Received:

Not reported

Not Reported

Not Reported

Date Amended to Include Animals:

Permit Expiration Date:

Abandonment Report Received:

Plugged an Abandoned Date:

Not Reported

Not Reported

Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: 0 Total Depth of Well: 0 Depth to Static Water Level: 0 Ground Surface Elevation: 0 Acres Irrigated: 0 Totaling Flow Meter Reqd., Installed: Ν Cross Reference to Another Well or Record: 224834 Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported 00000 Well ID Number:

Well Construction Completed Date:

Not Reported
Pump Installation Completed Date:

Not Reported
Not Reported

Geophysical is Required and Received:

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

No

No

No

Not Reported

Not Reported

Last Staff Member to Update File: SMJ Water District: 08

Groundwater Basin Numb:00Basin Mgmt Dist Numb:0Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:101/4 Section:NW

1/4 1/4: NW 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Not Reported Lot Number: Not Reported Block Number: Filing Number: Not Reported Approval Engineer: SMJ Designation Number: Not Reported

Comments: Not Reported Utm_x: 519757.125

Utm_y: 4396916 Loc_source: CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

M48
East CO WELLS COWW035029

East 1/2 - 1 Mile Higher

Site Name: BUCKLEY AIR NATIONAL GUARD
Mailing Address: ENVIRONMENTAL RESOURCE
ENVIRONMENTAL RESOURCE
GREENWOOD VILGE, CO 80111

Telephone: 3037415050

Water Division:1County Code:3Receipt:0033858APermit Number:33858Suffix Code:MHReplacement Code:Not Reported

Valid Well: No Parcel: 0

Application Date: 07/06/1998

Application Status: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Permit Status: Not Reported Permit Stat Date: Not Reported

Last Action Updated: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Last Action Date: 07/08/1998

Permit, Denial (AD) or Monitoring Hole Issued: 07/06/1998 Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min): 0 Well Proposed Depth (Feet): 35 Proposed Annual Appropriation (Acre Feet): 0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Permit Expiration Date: 10/06/1998 Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0 Depth to Top of 1st Perforated Casing: 0000 Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: Total Depth of Well: 0 Depth to Static Water Level: 0 Ground Surface Elevation: 0 Acres Irrigated: 0 Totaling Flow Meter Reqd., Installed: Ν

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aguifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: 00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No Contractor's License: **AUTH** Pump Installer's License: Not Reported Not Reported Pump Installation Report to DWR: Statute Which Permit Issued Under: Not Reported

Last Staff Member to Update File: **KMG** Water District: 02

Basin Mgmt Dist Numb: 00 Groundwater Basin Numb: 00 Dist from Section Line: Principal Meridian: 00 0660W 040S Range: Township: Section: 10 1/4 Section: NW

1/4 1/4: NW 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Lot Number: Not Reported Sub Division: Not Reported Not Reported Block Number: Filing Number: Not Reported Approval Engineer: Not Reported **Designation Number:** Not Reported

Comments: Not Reported Utm_x: 519757.125

4396916 CarteView 2/17/2000 Utm_y: Loc_source:

Usage: Q, Monitoring Well (Permitted)

M49 **CO WELLS** COWW041919 **East**

1/2 - 1 Mile Higher

> Site Name: **BUCKLEY AFB** Mailing Address: C/O URS

C/O URS **DENVER, CO 80237**

Telephone: 3037964666

Water Division: County Code: 3

Receipt: 0039926 Permit Number: 39926 Suffix Code: MH Replacement Code: Not Reported

Valid Well: No Parcel: 0

Application Date: 08/17/2001

Application Status: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Permit Status: Not Reported
Permit Stat Date: Not Reported

Last Action Updated: Well construction report received

Last Action Date: 12/11/2001

Permit, Denial (AD) or Monitoring Hole Issued: 08/20/2001
Construction/Test report Received by DWR: 12/11/2001
Well Proposed Yield (Gal/Min): 0

Well Proposed Depth (Feet):

90

Well Proposed Annual Appropriation (Acre Feet):

90

00

00

Well Application Type: Not reported Well Type: Not reported First Beneficial Use Date: Not Reported Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Permit Expiration Date: 11/17/2001 Not Reported Abandonment Report Received: Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0035
Depth to Base of Last Perforated Casing: 0045

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: Total Depth of Well: 45 Depth to Static Water Level: 0 Ground Surface Elevation: 5598 Acres Irrigated: 0 Totaling Flow Meter Reqd., Installed: Ν 238177 Cross Reference to Another Well or Record: Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: 00000 Well Construction Completed Date: 08/23/2001 Pump Installation Completed Date: Not Reported Geophysical is Required and Received: Nο

Contractor's License:

Pump Installer's License:

Not Reported
Pump Installation Report to DWR:

Statute Which Permit Issued Under:

Last Staff Member to Update File:

AUTH

Not Reported

Not Reported

ADS

Last Staff Member to Update File: AD: Water District: 02

Groundwater Basin Numb:00Basin Mgmt Dist Numb:00Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:101/4 Section:NW

1/4 1/4: NW 1/4 1/4 1/4: Not Reported Not Reported Aquifer: GW 2nd Aquifer: Not Reported Not Reported Sub Division: Lot Number: Filing Number: Block Number: Not Reported Not Reported Designation Number: Not Reported Not Reported Approval Engineer:

Comments: 12 wells ALSO SEE 238178-238188

Utm_x: 519757.125

 Utm_y:
 4396916
 Loc_source:
 CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

Map ID Direction Distance

Elevation Database EDR ID Number

L50 North FED USGS 394410104471301

1/2 - 1 Mile Lower

BASIC WELL DATA

Site Type: Single well, other than collector or Ranney type

Year Constructed: 1964 County: Arapahoe 5473.00 ft. Colorado Altitude: State: Well Depth: 616.00 ft. Topographic Setting: Not Reported Depth to Water Table: Prim. Use of Site: Withdrawal of water 342.00 ft.

Date Measured: 07071978 Prim. Use of Water: Domestic

51 CO WELLS COWW262049

Parcel:

1/2 - 1 Mile Lower

Site Name: HORNER EARL J.
Mailing Address: 1250 RICHFIELD ST

AURORA, CO 80011

Telephone: Not Reported

Water Division:1County Code:3Receipt:9007806Permit Number:97387Suffix Code:Not ReportedReplacement Code:Not Reported

Valid Well: Yes

Application Date: Not Reported Application Status: Not Reported Permit Status: Not Reported Permit Stat Date: Not Reported Last Action Updated: Not Reported Last Action Date: Not Reported

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: 04/30/1978 Date Statement of Use Received: Not Reported Not Reported Date Amended to Include Animals: Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet:

Depth to Top of 1st Perforated Casing:

Depth to Base of Last Perforated Casing:

0000

Water Court Case Number: Not Reported

Cross Reference to Another Well or Record:
Notice of Well Completion Recvd. for Non-trib Aquifer:
Not Reported
Notice of Beneficial Use Recvd. for Non-trib Aquifer:
Well ID Number:

Not Reported
Not Reported
Not Reported
Not Reported
Not Reported

Well Construction Completed Date: Not Reported

Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License: Not Reported Pump Installer's License: Not Reported Pump Installation Report to DWR: Not Reported Statute Which Permit Issued Under: Not Reported Last Staff Member to Update File: Not Reported 02

Water District:

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00 1400N 1250W Dist from Section Line: Principal Meridian:

0660W 040S Range: Township: Section: 04 1/4 Section: NW 1/4 1/4: SW 1/4 1/4 1/4: Not Reported

Aquifer: GW 2nd Aquifer: Not Reported Not Reported Sub Division: Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Approval Engineer: Not Reported **Designation Number:** Not Reported

Comments: Not Reported 518319.281 Utm_x:

Utm_y: 4398314.5 Loc_source: CarteView 2/17/2000

Domestic Usage:

Shallow Water Depth: 24

NNW **AQUIFLOW** 8386 Groundwater Flow: Not Reported 1 - 2 Miles

Not Reported Deep Water Depth: Lower Date: 8/2/94

Shallow Water Depth: 17

NNE AQUIFLOW 8078 WNW Groundwater Flow: 1 - 2 Miles

Deep Water Depth: Not Reported Lower Date: 10/94

54 Shallow Water Depth: 12 NE NW **AQUIFLOW** 8178 Groundwater Flow:

1 - 2 Miles Deep Water Depth: 15 Lower Date: 4/15/92

N55 Shallow Water Depth: 13.58

West 1 - 2 Miles **AQUIFLOW** 8058 Groundwater Flow: NNE Deep Water Depth: 16.53 Lower Date: 9/8/94

N56 Shallow Water Depth: 15.3 **AQUIFLOW** 8011 West Not Reported Groundwater Flow:

1 - 2 Miles Deep Water Depth: 16.94 Lower Date: 5/18/90

Shallow Water Depth: 14 **WSW** AQUIFLOW 8499

Groundwater Flow: NOT REPORTED 1 - 2 Miles Deep Water Depth: Not Reported Lower Date: 8/20/89

AREA RADON INFORMATION

Federal EPA Radon Zone for ARAPAHOE County: 1

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 80011

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor Living Area - 2nd Floor	Not Reported Not Reported	Not Reported Not Reported	Not Reported Not Reported	Not Reported Not Reported
Basement	7.000 pCi/L	33%	67%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOWR Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the national Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-260-2805

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-260-2805

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: In November 1971 the United States Geological Survey (USGS) implemented a national water resource information tracking system. This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on more than 900,000 wells, springs, and other sources of groundwater.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STATE RECORDS

Colorado GIS Well Database

Source: Office of State Engineer, Division of Water Resources

Telephone: 303-866-3581

The GIS Well database includes all wells that the Division of Water Resources permits.

Oil and Gas Well Locations

Source: Department of Natural Resources

Telephone: 303-894-2100

RADON

Area Radon Information

Source: USGS

Telephone: 303-202-4210

The National Radon Database has been developed by the U.S. Environmental Protection Agency

(USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 202-564-9370

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor

radon levels.

OTHER

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration



The EDR Radius Map with GeoCheck®

South Buckley AFB Aspen Street Aurora, CO 80011

Inquiry Number: 896033.2s

December 11, 2002

The Source For Environmental Risk Management Data

3530 Post Road Southport, Connecticut 06890

Nationwide Customer Service

Telephone: 1-800-352-0050 Fax: 1-800-231-6802 Internet: www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map.	3
Map Findings Summary.	4
Map Findings.	6
Orphan Summary	10
EPA Waste Codes	EPA-1
Government Records Searched/Data Currency Tracking	GR-1
GEOCHECK ADDENDUM	
Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting Source Map.	A-7
Physical Setting Source Map Findings.	A-8
Physical Setting Source Records Searched	A-30

Thank you for your business.Please contact EDR at 1-800-352-0050 with any questions or comments.

Disclaimer Copyright and Trademark Notice

This report contains information obtained from a variety of public and other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL EDR BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES.

Entire contents copyright 2001 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and the edr logos are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

TARGET PROPERTY INFORMATION

ADDRESS

ASPEN STREET AURORA, CO 80011

COORDINATES

Latitude (North): 39.703700 - 39° 42' 13.3" Longitude (West): 104.767500 - 104° 46' 3.0"

Universal Tranverse Mercator: Zone 13 UTM X (Meters): 519932.2 UTM Y (Meters): 4394688.0

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property: 2439104-F7 FITZSIMONS, CO Source: USGS 7.5 min quad index

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

FEDERAL ASTM STANDARD

NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
CERC-NFRAP	CERCLIS No Further Remedial Action Planned
CORRACTS	. Corrective Action Report
RCRIS-TSD	Resource Conservation and Recovery Information System
RCRIS-LQG	Resource Conservation and Recovery Information System
RCRIS-SQG	. Resource Conservation and Recovery Information System
ERNS	Emergency Response Notification System

STATE ASTM STANDARD

SHWS	This state does not maintain a SHWS list. See the Federal CERCLIS list.
SWF/LF	Solid Waste Sites & Facilities
CO TRUST	Lust Trust Sites
UST	Underground Storage Tank Database
INDIAN UST	Underground Storage Tanks on Indian Land
VCP	Voluntary Cleanup & Redevelopment Act Application Tracking Report

FEDERAL ASTM SUPPLEMENTAL

CONSENT...... Superfund (CERCLA) Consent Decrees

ROD...... Records Of Decision

Delisted NPL......National Priority List Deletions

FINDS Facility Index System/Facility Identification Initiative Program Summary Report

HMIRS..... Hazardous Materials Information Reporting System

MLTS..... Material Licensing Tracking System

RAATS RCRA Administrative Action Tracking System
TRIS Toxic Chemical Release Inventory System

FTTS......FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, &

Rodenticide Act)/TSCA (Toxic Substances Control Act)

STATE OR LOCAL ASTM SUPPLEMENTAL

HISTORICAL LANDFILL... Historical Landfill List
AST...... Aboveground Tank List
CO FRAIS.

CO ERNS...... Spills Database

METHANE SITE...... Methane Site Investigations - Jefferson County 1980

Methane Investigation...... Methane Gas & Swamp Findings

EDR PROPRIETARY HISTORICAL DATABASES

Coal Gas_____ Former Manufactured Gas (Coal Gas) Sites

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Elevations have been determined from the USGS 1 degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. EDR's definition of a site with an elevation equal to the target property includes a tolerance of +/- 10 feet. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property (by more than 10 feet). Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

FEDERAL ASTM STANDARD

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites

which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 08/15/2002 has revealed that there is 1 CERCLIS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir Map	ID Page
BUCKLEY AIR FORCE BASE	660 S ASPEN ST	1/4 - 1/2ESE A2	6

STATE ASTM STANDARD

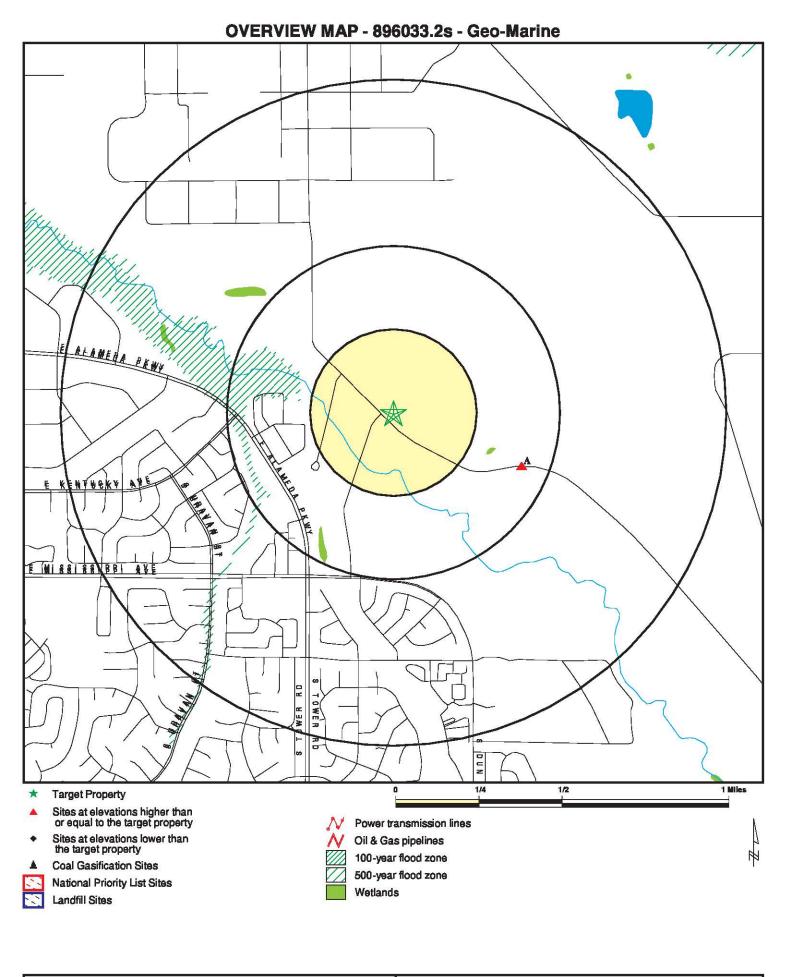
LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Health's Leaking Underground Storage Tank List.

A review of the LUST list, as provided by EDR, and dated 10/07/2002 has revealed that there is 1 LUST site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
BUCKLEY AIR NATIONAL GUARD	660 S ASPEN ST	1/4 - 1/2ESE	A1	6

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
BUCKLEY AIR BASE/USDOF BUCKLEY ANG BASE BUCKLEY EAST 6TH AVE SITE LOWRY COMMUNICATION FACILITY ANNEX BUCKLEY ANG BLDG 714 BUCKLEY ANG - BLDG 914 BUCKLEY BLDG 906 RINGSBY LAND TRUST BUCKLEY ANG 990 - 1000 SOUTH IRONTON BUCKLEY AIR NATL GUARD BASE BUCKLEY AFB BUCKLEY AIR NATL GUARD BASE BUCKLEY ANG BASE BUCKLEY ANG BASE BUCKLEY ANG 340 N BEAVER CREEK ST 500 BUCKLEY ANG 340 N BEAVER CREEK ST 500 BUCKLEY AIR FORCE BASE BURKLEY AIR FORCE BASE BURKLEY AIR ORCE BASE BURKLEY AIR ORCE BASE BURKLEY AIR BUCKLEY & ILIFF (1 BLOCK AWAY) GOODYEAR/BUCKLEY & ILIFF (1 BLOCK AWAY) NATIONAL GUARD BASE NEAR THE DENVER CIVIL AIRPORT BUCKLEY FI ORCHID RD & BUCKLEY RD. QUINCY AND BUCKLEY ROAD QUINCY AND BUCKLEY ROAD TRAILER#177/WOODSHIRE E.TAILER PARK/COLFAX AND BUCKLEY	Database(s) FTTS FTTS CERCLIS, FINDS CERCLIS, FINDS LUST LUST LUST LUST LUST LUST LUST LUS
BLDG. 1001 660 SOUTH ASPEN STREET BUCKLEY ANG BASE 140 SPTG/CEV STOP 26 660 S ASPEN ST	ERNS ERNS

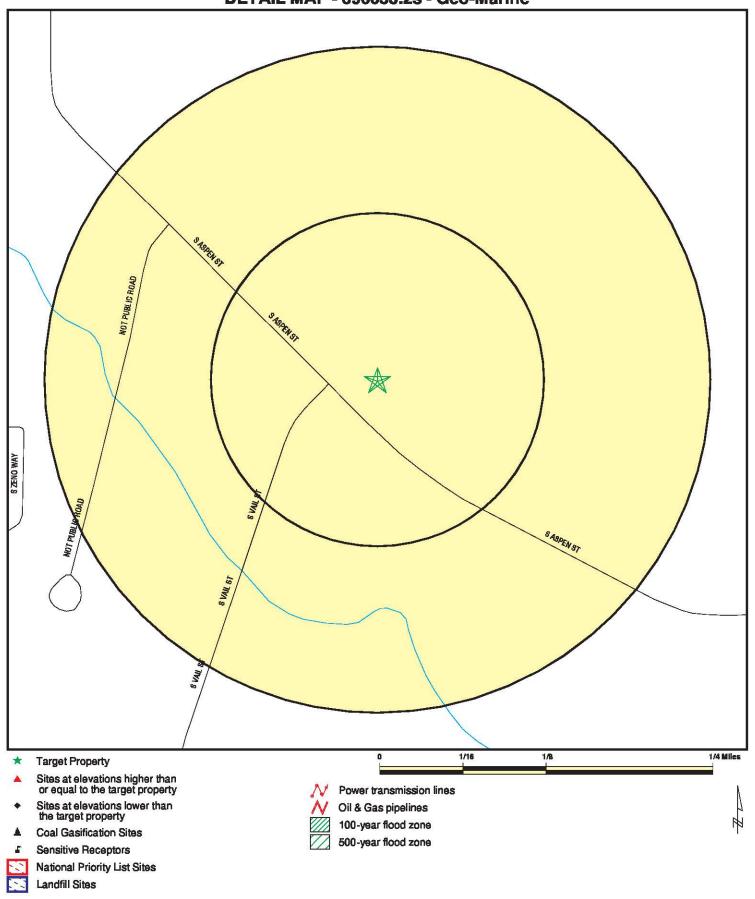


TARGET PROPERTY: South Bu ADDRESS: Aspen Si CITY/STATE/ZIP: Aurora C LAT/LONG: 39.7037

South Buckley AFB Aspen Street Aurora CO 80011 39.7037 / 104.7675 CUSTOMER: Geo-Marine CONTACT: Donna DeYoung INQUIRY#: 896033.2s

DATE: December 11, 2002 12:54 pm

DETAIL MAP - 896033.2s - Geo-Marine



TARGET PROPERTY: ADDRESS: CITY/STATE/ZIP: LAT/LONG:

South Buckley AFB **Aspen Street** Aurora CO 80011 39.7037 / 104.7675

CUSTOMER: Geo-Marine CONTACT: INQUIRY #:

Donna DeYoung 896033.2s

December 11, 2002 12:54 pm DATE:

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FEDERAL ASTM STANDARI	<u>D</u>							
NPL Proposed NPL CERCLIS CERC-NFRAP CORRACTS RCRIS-TSD RCRIS Lg. Quan. Gen. RCRIS Sm. Quan. Gen. ERNS		1.000 1.000 0.500 0.250 1.000 0.500 0.250 TP	0 0 0 0 0 0 0 0 0 NR	0 0 0 0 0 0 0 0 NR	0 0 1 NR 0 0 NR NR NR	0 NR NR 0 NR NR NR	NR NR NR NR NR NR NR NR	0 0 1 0 0 0 0
State Haz. Waste State Landfill LUST CO TRUST UST INDIAN UST		N/A 0.500 0.500 0.500 0.250 0.250	N/A 0 0 0 0	N/A 0 0 0 0	N/A 0 1 0 NR NR	N/A NR NR NR NR	N/A NR NR NR NR	N/A 0 1 0 0
VCP FEDERAL ASTM SUPPLEMI	ENTAL	0.500	0	0	0	NR	NR	0
CONSENT ROD Delisted NPL FINDS HMIRS MLTS MINES NPL Liens PADS RAATS TRIS TSCA SSTS FTTS		1.000 1.000 1.000 TP TP TP 0.250 TP TP TP TP TP TP	0 0 0 NR NR NR NR NR NR NR NR NR	0 0 NR NR NR NR NR NR NR NR NR NR	0 0 NR NR NR NR NR NR NR NR NR NR NR	0 0 NR NR NR NR NR NR NR NR	NR NR NR NR NR NR NR NR NR NR NR NR	0 0 0 0 0 0 0 0 0
STATE OR LOCAL ASTM SUPPLEMENTAL								
Historical Landfill AST CO ERNS Methane Site Methane Investigation		0.500 TP TP TP TP	0 NR NR NR NR	0 NR NR NR NR	0 NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	0 0 0 0
EDR PROPRIETARY HISTOI	RICAL DATABA	ASES						
Coal Gas		1.000	0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Search

Target Distance Total

Database Property (Miles) < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Plotted

AQUIFLOW - see EDR Physical Setting Source Addendum

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

N/A = This State does not maintain a SHWS list. See the Federal CERCLIS list.

MAP FINDINGS Map ID

Direction Distance Distance (ft.)

EDR ID Number Elevation Site Database(s) **EPA ID Number**

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

BUCKLEY AIR NATIONAL GUARD Α1 **ESE** 660 S ASPEN ST

LUST **CO ERNS** N/A

1/4-1/2 AURORA, CO 80017

S104792182

2201 ft. Higher

Site 1 of 2 in cluster A

LUST:

9/6/00 8329 Closed

Status: CO ERNS:

Log Date:

Event ID:

Facility Id: 2000-318 Date Entered Into System: 09/04/2000 Time Entered Into System: 700 Date Report Received: 09/05/2000 Time Report Received: 11:55

National Response Center:

Notified: Yes Number: 541077

Prp Name: **COLORADO NATIONAL GUARD** Prp Contact: VERDEEA WATT-HAZEN Prp Address: 660 S ASPEN STREET

AURORA, CO 80011

Prp County: **ARAPAHOE** Prp Phone: 303-677-1900 Spill Date: 09/05/2000 Mile Post: Not reported

PETE LAUX, HMWMD & OIS Notified Name:

Material Spilled: DIESEL FUEL Quantity Spilled: 1000 Units: Gallons

Amount Released to Water: 0

Source of Spill: Aboveground Tank Source Type: Not reported Medium Affected: Land Waterway Affected: Not reported Land, Operator Error Cause of Spill: NRC REPORT Report Taken By: Responders: Not reported

Responders Action: THE SPILL WAS CONTAINED IN THE BERM AREA AND PUMPED

OUT BY THERMAL FLUIDS

Spill Information: ABOVEGROUND STORAGE TANK

Information Caller Gave: VALVES LEFT OPEN

THE CALLER STATED THAT VALVES ON A FUEL TANK WAS LEFT Comments: OPEN AND MATERIAL WAS SPILLED INTO A CONTAINMENT AREA.

Responder's Comments:

Comments 2:

Deaths: Not reported Injuries: Not reported Evacuation: Not reported

Evacuation Number: No

A2 BUCKLEY AIR FORCE BASE ESE 660 S ASPEN ST 1/4-1/2 **AURORA, CO 80011**

CERCLIS 1000271337 RCRIS-SQG CO9570025644 **FINDS**

2201 ft.

Higher Site 2 of 2 in cluster A Map ID MAP FINDINGS

Direction
Distance
Distance (ft.)

Distance (ft.)

Elevation Site

EDR ID Number

Database(s)

EPA ID Number

BUCKLEY AIR FORCE BASE (Continued)

1000271337

CERCLIS Classification Data:

Site Incident Category: Unknown Federal Facility: Federal Facility

Non NPL Status: NFRAP

Ownership Status: Federally Owned NPL Status: Not on the NPL

Site Description: Contains several sites with potential contamination. Documented

release of hazardous substance beyond northern boundary. Elevated levels of cd, phenolics, tds, tdx, toc detected in groundwater and soil. Contaminant movement potentially impacts lo cal and regional water supplies. Prior to 1985 waste oil and organic cleaning fluids were reportedly disposed of in former warehouse areas (site 10).

CERCLIS Assessment History:

Assessment:	DISCOVERY	Completed:	09/01/1982
Assessment:	FED FAC PRELIMINARY ASSESSMENT F	RECOLOEN/pleted:	09/30/1982
Assessment:	FED FAC SITE INSPECTION REVIEW	Completed:	03/30/1986
Assessment:	FED FAC SITE INSPECTION REVIEW	Completed:	03/30/1986
Assessment:	PRELIMINARY ASSESSMENT	Completed:	05/30/1987
Assessment:	FED FAC SITE INSPECTION REVIEW	Completed:	05/30/1987
Assessment:	FED FAC SITE INSPECTION REVIEW	Completed:	05/30/1987
Assessment:	FED FAC SITE INSPECTION REVIEW	Completed:	05/30/1987
Assessment:	FED FAC SITE INSPECTION REVIEW	Completed:	05/30/1987
Assessment:	FED FAC SITE INSPECTION REVIEW	Completed:	05/30/1987
Assessment:	FED FAC SITE INSPECTION REVIEW	Completed:	05/30/1987
Assessment:	FF RI	Completed:	09/30/1987
Assessment:	FED FAC PRELIMINARY ASSESSMENT F	RECOLOEMO/leted:	09/30/1987
Assessment:	FED FAC SITE INSPECTION REVIEW	Completed:	09/30/1987
Assessment:	FED FAC SITE INSPECTION REVIEW	Completed:	09/30/1987
Assessment:	FF RI	Completed:	09/30/1991
Assessment:	FF RI	Completed:	09/01/1994
Assessment:	RECORD OF DECISION	Completed:	09/01/1994
Assessment:	SITE INSPECTION	Completed:	09/15/1994
Assessment:	FF RI	Completed:	09/30/1994
Assessment:	FF RI	Completed:	09/30/1994
Assessment:	FF RI	Completed:	09/30/1994
Assessment:	FF RI	Completed:	03/30/1995
Assessment:	FF RI	Completed:	08/30/1995
Assessment:	ENGINEERING EVAL/COST ANALYSIS	Completed:	07/30/1998
Assessment:	ENGINEERING EVAL/COST ANALYSIS	Completed:	06/27/2001

CERCLIS Site Status:

Not reported

CERCLIS Alias Name(s):

BUCKLEY ANGB

US ARMY AIR CORPS BASE

BUCKLEY AIR NATIONAL GUARD BASE (ANGB)

BUCKLEY ANG FORMER WAREHOUSE AREA

BUCKLEY AIR FORCE BASE

Map ID MAP FINDINGS

Direction
Distance
Distance (ft.)
Elevation Site

Distance (ft.)

Elevation Site

EDR ID Number

Database(s)

EPA ID Number

BUCKLEY AIR FORCE BASE (Continued)

1000271337

RCRIS:

Owner: US AIR FORCE

(303) 677-9059

EPA ID: CO9570025644

Contact: DALE CARLSON

(303) 677-9059

Classification: Small Quantity Generator

Used Oil Recyc: No

TSDF Activities: Not reported

BIENNIAL REPORTS:

Last Biennial Reporting Year: 1999

<u>Waste</u>	Quantity (Lbs)	<u>Waste</u>	Quantity (Lbs)
D001	19115.00	D002	6824.00
D003	6824.00	D006	10587.00
D007	11952.00	D008	120.00
D009	11326.00	D011	7524.00
D018	16859.00	D035	10587.00
D039	9080.00	F001	3763.00
F002	5128.00	F003	10587.00
F004	3763.00	F005	11952.00
P127	6824.00	U002	6824.00

Violation Status: Violations exist

Regulation Violated: 268.7, 268.9

Area of Violation: TSD-LAND BAN REQUIREMENTS

Date Violation Determined: 03/02/1999
Actual Date Achieved Compliance: 04/06/1999

Regulation Violated: 265.16,.174,.173,262.34,100.10

Area of Violation: GENERATOR-ALL REQUIREMENTS (OVERSIGHT)

Date Violation Determined: 03/02/1999
Actual Date Achieved Compliance: 04/06/1999
Regulation Violated: Not reported

Area of Violation: GENERATOR-ALL REQUIREMENTS (OVERSIGHT)

Date Violation Determined: 10/05/1990 Actual Date Achieved Compliance: 03/17/1992

Enforcement Action: INITIAL 3008(A) COMPLIANCE ORDER

Enforcement Action Date: 09/30/1991
Penalty Type: Not reported

Regulation Violated: Not reported

Area of Violation: GENERATOR-ALL REQUIREMENTS (OVERSIGHT)

Date Violation Determined: 08/30/1989
Actual Date Achieved Compliance: 04/20/1990

Enforcement Action: WRITTEN INFORMAL

Enforcement Action Date: 01/05/1990
Penalty Type: Not reported

Map ID MAP FINDINGS Direction

Distance
Distance (ft.)
Elevation Site

EDR ID Number Database(s) EPA ID Number

BUCKLEY AIR FORCE BASE (Continued)

1000271337

There are 4 violation record(s) reported at this site:

		Date of
Evaluation	Area of Violation	Compliance
Compliance Evaluation Inspection	TSD-LAND BAN REQUIREMENTS	19990406
	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19990406
Operation and Maintenance Inspection	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19920317
Compliance Evaluation Inspection	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19900420

FINDS:

Other Pertinent Environmental Activity Identified at Site:

AIRS Facility System (AIRS/AFS)

Biennial Reporting System (BRS)

CATS

Comperhensive Environmental Response, Compensation and Liability Information System (CERCLIS)

Facility Registry System (FRS)

National Compliance Database (NCDB)

National Emissions Trends (NET)

National Toxics Inventory (NTI)

Permit Compliance System (PCS)

Resource Conservation and Recovery Act Information system (RCRAINFO)

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
AURORA	2000537767	990 - 1000 SOUTH IRONTON	990 - 1000 SOUTH IRONTON		ERNS
AURORA	1004445151	BUCKLEY AIR BASE/USDOF	6TH AVE E, BUILDING 801	80011	FTTS
AURORA	S103851358	BUCKLEY ANG	BLDG 407	80011	LUST
AURORA	S105567789	BUCKLEY ANG	BLDG 509 - TRANSMITTER	80017	LUST
AURORA	S105567784	BUCKLEY ANG	BLDG 1607 - TRANSMITTER	80017	LUST
AURORA	S105567783	BUCKLEY AFB BLDG 1603	BLDG 1603	80017	LUST
AURORA	S104038077	BUCKLEY ANG	BLDG 433	80017	LUST
AURORA	1005623214	BUCKLEY ANG BASE	BLDG. 1005	80011	FTTS
AURORA	90184508	BUCKLEY AIR NATL GUARD BASE	BUCKLEY AIR NATL GUARD BASE		ERNS
AURORA	89117639	BUCKLEY AFB	BUCKLEY AFB		ERNS
AURORA	94478310	BUCKLEY AIR NATL GUARD BASE / 340 N BEAVER CREEK ST	BUCKLEY AIR NATL GUARD BASE / 340 N BEAVER CREEK ST	80011	ERNS
AURORA	94401574	BUCKLEY ANG BASE	BUCKLEY ANG BASE	80011	ERNS
AURORA	94376987	BUCKLEY ANG 340 N BEAVER CREEK ST	BUCKLEY ANG 340 N BEAVER CREEK ST	80011	ERNS
AURORA	91238168	500 BUCKLEY RD./BEHIND 505 NUCLA WAY	500 BUCKLEY RD./BEHIND 505 NUCLA WAY	80011	ERNS
AURORA	90165374	BUCKLEY AIR FORCE BASE	BUCKLEY AIR FORCE BASE	80011	ERNS
AURORA	1003073250	BUCKLEY EAST 6TH AVE SITE	BUCKLEY EAST 6TH AVE.	80011	CERCLIS, FINDS
AURORA	89107352	BURGER KING RESTURANT, 3129 SOUTH PARKER RD.	BURGER KING RESTURANT, 3129 SOUTH PARI RD.		ERNS
AURORA	S105567928	BLDG 714	NE CORNER ASPEN / S VAIL DRIVE	80017	LUST
AURORA	S105567970	BUCKLEY ANG - BLDG 914	SE CRNR SILVER CREEK / STEAMBO	80017	LUST
AURORA	S103851362	BUCKLEY BLDG 906	DEVILS THUMB / WOLF CREEK	80017	LUST
AURORA	2000545716	SOUTH DILLON WAY	SOUTH DILLON WAY		ERNS
AURORA	90177131	FLT LINE ADJACENT TO BLD 909/BUCKLEY RD	FLT LINE ADJACENT TO BLD 909/BUCKLEY RD		ERNS
AURORA	90478710	GOODYEAR/BUCKLEY & ILIFF (1 BLOCK AWAY)	GOODYEAR/BUCKLEY & ILIFF (1 BLOCK AWAY)		ERNS
AURORA	90158554	GOODYEAR/BUCKLEY & ILIFF (1 BLOCK AWAY)	GOODYEAR/BUCKLEY & ILIFF (1 BLOCK AWAY)		ERNS
AURORA	879824	NATIONAL GUARD BASE NEAR THE DENVER CIVIL AIRPORT BUCKLEY FI	NATIONAL GUARD BASE NEAR THE DENVER CIVIL AIRPORT BUCKLEY FI		ERNS
AURORA	89117696	ORCHID RD & BUCKLEY RD.	ORCHID RD & BUCKLEY RD.		ERNS
AURORA	96482656	QUINCY AND BUCKLEY ROAD	QUINCY AND BUCKLEY ROAD		ERNS
AURORA	8872229	QUINCY AND BUCKLEY ROAD	QUINCY AND BUCKLEY ROAD		ERNS
AURORA	88482656	QUINCY AND BUCKLEY ROAD	QUINCY AND BUCKLEY ROAD		ERNS
AURORA	S105567971	RINGSBY LAND TRUST	SEC 1 TS 4 S R 66 W	80017	LUST
AURORA	S105567980	BUCKLEY ANG	SITE 850 ASPEN DR / BRECKENRI	80017	LUST
AURORA	96473730	TRAILER#177/WOODSHIRE E.TAILER PARK/COLFAX AND BUCKLEY	TRAILER#177/WOODSHIRE E.TAILER PARK/COLFAX AND BUCKLEY		ERNS
AURORA	1003862201	LOWRY COMMUNICATION FACILITY ANNEX	TWO MILES EAST OF FORMER LOWRY AFB ON	80011	CERCLIS, FINDS
BUCKLEY ANG BASE	98462811	BLDG. 1001 660 SOUTH ASPEN STREET	BLDG. 1001 660 SOUTH ASPEN STREET	80011	ERNS
BUCKLEY ANG BASE	96483329	BUCKLEY ANG BASE 140 SPTG/CEV STOP 26 660 S ASPEN ST	BUCKLEY ANG BASE 140 SPTG/CEV STOP 26 660 S ASPEN ST	80011	ERNS

EPA Waste Codes Addendum

Code	Description
D001	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
D002	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
D003	A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
D006	CADMIUM
D007	CHROMIUM
D008	LEAD
D009	MERCURY
D011	SILVER
D018	BENZENE
D035	METHYL ETHYL KETONE
D039	TETRACHLOROETHYLENE
F001	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F002	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY

EPA Waste Codes Addendum

Code Description

VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

- THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
- THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
- THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
- U002 ACETONE (I)
- U002 2-PROPANONE (I)

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement

of the ASTM standard.

FEDERAL ASTM STANDARD RECORDS

NPL: National Priority List

Source: EPA Telephone: N/A

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/24/02 Date Made Active at EDR: 12/09/02

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 11/04/02

Elapsed ASTM days: 35

Date of Last EDR Contact: 11/04/02

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 8

Telephone 215-814-5418 Telephone: 303-312-6774

EPA Region 4

Telephone 404-562-8033

Proposed NPL: Proposed National Priority List Sites

Source: EPA Telephone: N/A

Date of Government Version: 10/24/02 Date of Data Arrival at EDR: 11/04/02

Date Made Active at EDR: 12/09/02 Elapsed ASTM days: 35

Database Release Frequency: Semi-Annually Date of Last EDR Contact: 11/04/02

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

Source: EPA

Telephone: 703-413-0223

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 08/15/02 Date Made Active at EDR: 10/28/02

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 09/23/02

Elapsed ASTM days: 35

Date of Last EDR Contact: 09/23/02

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Source: EPA

Telephone: 703-413-0223

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 09/15/02 Date of Data Arrival at EDR: 10/03/02

Date Made Active at EDR: 10/28/02 Elapsed ASTM days: 25

Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/23/02

CORRACTS: Corrective Action Report

Source: EPA

Telephone: 800-424-9346

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 05/02/02 Date of Data Arrival at EDR: 05/06/02

Date Made Active at EDR: 07/15/02 Elapsed ASTM days: 70

Database Release Frequency: Semi-Annually Date of Last EDR Contact: 09/09/02

RCRIS: Resource Conservation and Recovery Information System

Source: EPA/NTIS Telephone: 800-424-9346

Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate,

transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery

Act (RCRA).

Date of Government Version: 09/09/02 Date of Data Arrival at EDR: 09/24/02

Date Made Active at EDR: 10/28/02 Elapsed ASTM days: 34

Database Release Frequency: Varies Date of Last EDR Contact: 09/24/02

ERNS: Emergency Response Notification System

Source: EPA/NTIS Telephone: 202-260-2342

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous

substances.

Date of Government Version: 12/31/01 Date of Data Arrival at EDR: 07/02/02

Date Made Active at EDR: 07/15/02 Elapsed ASTM days: 13

Database Release Frequency: Varies Date of Last EDR Contact: 10/28/02

FEDERAL ASTM SUPPLEMENTAL RECORDS

BRS: Biennial Reporting System

Source: EPA/NTIS Telephone: 800-424-9346

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG)

and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/99 Date of Last EDR Contact: 09/16/02

Database Release Frequency: Biennially Date of Next Scheduled EDR Contact: 12/16/02

CONSENT: Superfund (CERCLA) Consent Decrees

Source: EPA Regional Offices

Telephone: Varies

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released

periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: N/A

Date of Last EDR Contact: N/A

Database Release Frequency: Varies Date of Next Scheduled EDR Contact: N/A

ROD: Records Of Decision

Source: EPA

Telephone: 703-416-0223

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical

and health information to aid in the cleanup.

Date of Government Version: 12/21/01 Date of Last EDR Contact: 10/07/02

Database Release Frequency: Annually Date of Next Scheduled EDR Contact: 01/06/03

DELISTED NPL: National Priority List Deletions

Source: EPA Telephone: N/A

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the

NPL where no further response is appropriate.

Date of Government Version: 10/18/02 Date of Last EDR Contact: 11/04/02

Database Release Frequency: Quarterly Date of Next Scheduled EDR Contact: 02/03/03

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report

Source: EPA Telephone: N/A

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 10/10/02 Date of Last EDR Contact: 10/07/02

Database Release Frequency: Quarterly Date of Next Scheduled EDR Contact: 01/06/03

HMIRS: Hazardous Materials Information Reporting System

Source: U.S. Department of Transportation

Telephone: 202-366-4555

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 07/31/02 Date of Last EDR Contact: 10/21/02

Database Release Frequency: Annually Date of Next Scheduled EDR Contact: 01/20/03

MLTS: Material Licensing Tracking System Source: Nuclear Regulatory Commission

Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency,

EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/21/02 Date of Last EDR Contact: 10/08/02

Database Release Frequency: Quarterly Date of Next Scheduled EDR Contact: 01/06/03

MINES: Mines Master Index File

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959

Date of Government Version: 09/10/02 Date of Last EDR Contact: 09/30/02

Database Release Frequency: Semi-Annually

Date of Next Scheduled EDR Contact: 12/30/02

NPL LIENS: Federal Superfund Liens

Source: EPA

Telephone: 205-564-4267

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability.

USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91 Date of Last EDR Contact: 11/25/02

Database Release Frequency: No Update Planned Date of Next Scheduled EDR Contact: 02/24/03

PADS: PCB Activity Database System

Source: EPA

Telephone: 202-564-3887

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers

of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/28/02 Date of Last EDR Contact: 11/13/02

Database Release Frequency: Annually Date of Next Scheduled EDR Contact: 02/10/03

RAATS: RCRA Administrative Action Tracking System

Source: EPA

Telephone: 202-564-4104

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95 Date of Last EDR Contact: 09/10/02

Database Release Frequency: No Update Planned Date of Next Scheduled EDR Contact: 12/09/02

TRIS: Toxic Chemical Release Inventory System

Source: EPA

Telephone: 202-260-1531

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and

land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/00 Date of Last EDR Contact: 09/24/02

Database Release Frequency: Annually

Date of Next Scheduled EDR Contact: 12/23/02

TSCA: Toxic Substances Control Act

Source: EPA

Telephone: 202-260-5521

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant

site.

Date of Government Version: 12/31/98 Date of Last EDR Contact: 09/09/02

Database Release Frequency: Every 4 Years Date of Next Scheduled EDR Contact: 12/09/02

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA

Telephone: 202-564-2501

Date of Government Version: 04/25/02 Date of Last EDR Contact: 09/24/02

Database Release Frequency: Quarterly

Date of Next Scheduled EDR Contact: 12/23/02

SSTS: Section 7 Tracking Systems

Source: EPA

Telephone: 202-564-5008

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices

being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/00 Date of Last EDR Contact: 10/22/02

Database Release Frequency: Annually Date of Next Scheduled EDR Contact: 01/20/03

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-564-2501

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA. TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the

Agency on a quarterly basis.

Date of Government Version: 04/25/02 Date of Last EDR Contact: 09/24/02

Date of Next Scheduled EDR Contact: 12/23/02 Database Release Frequency: Quarterly

STATE OF COLORADO ASTM STANDARD RECORDS

SHWS: This state does not maintain a SHWS list. See the Federal CERCLIS list.

Source: EPA

Telephone: 703-413-0223

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: N/A Date Made Active at EDR: N/A

Database Release Frequency: N/A

Date of Data Arrival at EDR: N/A Elapsed ASTM days: N/A

Date of Last EDR Contact: 09/24/02

SWF/LF: Solid Waste Sites & Facilities Source: Department of Health Telephone: 303-692-3450

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 07/22/02 Date Made Active at EDR: 10/11/02 Database Release Frequency: Annually

Date of Data Arrival at EDR: 09/09/02

Elapsed ASTM days: 32

Date of Last EDR Contact: 09/09/02

LUST: Leaking Underground Storage Tank List

Source: Department of Labor and Employment, Oil Inspection Section

Telephone: 303-620-4021

The Leaking Underground Storage Tank List contains sites that have completed cleanup activities. This does not mean that the owner and/or operator has removed all of the contamination, but instead means that the actions taken have met the criteria that the division uses for determining adequate cleanup. It also contains those sites that have either been just identified as having a leak, or are in the process of remediating the contaminant problem but have not yet been closed and therefore the site has not received a final agency determination. Included in this category are those sites that have completed active remediation and are now conducting groundwater monitoring programs. Every effort is made to ensure the accuracy of the data contained in this database, however, the Department of Public Health and Environment does not guarantee that this listing is completely accurate or up-to-date. In the event that site specific data is desired or necessary to ensure accuracy, you are encouraged to contact our Records Center at (303) 692-3331 to arrange a meeting to review the site file(s).

Date of Government Version: 10/07/02 Date Made Active at EDR: 11/05/02 Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 10/07/02

Elapsed ASTM days: 29

Date of Last EDR Contact: 10/07/02

TRUST: Lust Trust Sites Source: Department of Health Telephone: 303-620-4016

List of complaint sites where there is no known responsible party. The state is doing investigations on them.

Date of Government Version: 12/07/99 Date Made Active at EDR: 01/06/00

Database Release Frequency: Varies

Date of Data Arrival at EDR: 12/08/99

Elapsed ASTM days: 29

Date of Last EDR Contact: 10/28/02

UST: Underground Storage Tank Database

Source: Department of Labor and Employment, Oil Inspection Section

Telephone: 303-620-4021

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 10/15/02

Date of Data Arrival at EDR: 10/15/02

Date Made Active at EDR: 10/23/02 Elapsed ASTM days: 8

Database Release Frequency: Quarterly Date of Last EDR Contact: 10/11/02

INDIAN UST: Underground Storage Tanks on Indian Land

Source: EPA Region 8 Telephone: 303-312-6137

> Date of Government Version: 10/04/02 Date of Data Arrival at EDR: 10/25/02

Date Made Active at EDR: 12/04/02 Elapsed ASTM days: 40

Database Release Frequency: Varies Date of Last EDR Contact: 10/03/02

VCP: Voluntary Cleanup & Redevelopment Act Application Tracking Report

Source: Department of Public Health and Environment

Telephone: 303-692-3331

The Voluntary Cleanup and Redevelopment Act is intended to permit and encourage voluntary cleanups by providing a method to determine clean-up responsibilities in planning the reuse of property. The VCRA was intended for sites

which were not covered by existing regulatory programs.

Date of Government Version: 08/01/02 Date of Data Arrival at EDR: 09/23/02

Date Made Active at EDR: 10/29/02 Elapsed ASTM days: 36

Database Release Frequency: Semi-Annually Date of Last EDR Contact: 09/23/02

STATE OF COLORADO ASTM SUPPLEMENTAL RECORDS

HISTORICAL LANDFILL: Historical Landfill List

Source: Department of Health Telephone: 303-692-3450 Abandoned/Inactive Landfills.

> Date of Government Version: 01/31/93 Date of Last EDR Contact: 09/05/96 Database Release Frequency: No Update Planned Date of Next Scheduled EDR Contact: N/A

AST: Aboveground Tank List

Source: Department of Labor and Employment, Oil Inspection Section

Telephone: 303-620-4021

Registered Aboveground Storage Tanks.

Date of Government Version: 10/15/02 Date of Last EDR Contact: 10/11/02 Date of Next Scheduled EDR Contact: 01/06/03

Database Release Frequency: Semi-Annually

CO ERNS: Spills Database

Source: Department of Public Health and Environmental

Telephone: 303-692-2000

Date of Government Version: 11/04/02 Date of Last EDR Contact: 11/04/02

Date of Next Scheduled EDR Contact: 02/03/03 Database Release Frequency: Quarterly

TC896033.2s Page GR-6

METHANE SITE: Methane Site Investigations - Jefferson County 1980

Source: Jefferson County Health Department

Telephone: 303-239-7175

Date of Government Version: 12/31/80

Date of Last EDR Contact: 01/27/95

Date of Next Scheduled EDR Contact: N/A

METHANE INVESTIGATION: Methane Gas & Swamp Findings

Source: Department of Health Telephone: 303-640-3335

Date of Government Version: 03/15/79

Date of Last EDR Contact: 01/27/95

Date of Next Scheduled EDR Contact: N/A

Date of Next Scheduled EDR Contact: N/A

LOCAL RECORDS

ADAMS COUNTY:

Summary Report on Methane Gas Hazards and Surveys Conducted on Domestic and Demolition Landfills in Adams County

Source: Tri-County Health Department

Telephone: 303-761-1340

Date of Government Version: 05/08/78

Date of Last EDR Contact: 01/27/95

Date of Next Scheduled EDR Contact: N/A

ARAPAHOE COUNTY:

A Survey of Landfills in Arapahoe County

Source: Tri-County Health Department

Telephone: 303-761-1340

Date of Government Version: 12/31/78

Date of Last EDR Contact: 01/27/95

Date of Next Scheduled EDR Contact: N/A

BOULDER COUNTY:

Old Landfill Sites

Source: Boulder County Health Department

Telephone: 303-441-1182

Date of Government Version: 05/01/86

Date of Last EDR Contact: 01/30/98

Date of Next Scheduled EDR Contact: N/A

DENVER COUNTY:

Landfills in Denver County

Source: City and County of Denver Telephone: 303-436-7300

Date of Government Version: 12/01/94 Date of Last EDR Contact: 12/18/94
Date of Next Scheduled EDR Contact: N/A

DOUGLAS COUNTY:

Douglas County Landfill Key

Source: Tri-County Health Department

Telephone: 303-761-1340

Date of Government Version: 06/12/91 Date of Last EDR Contact: 01/27/95
Database Release Frequency: No Update Planned Date of Next Scheduled EDR Contact: N/A

PUEBLO COUNTY:

Designated Disposal & Landfill Sites

Source: Pueblo City-County Health Department

Telephone: 719-583-4300

Date of Government Version: 04/30/90 Date of Last EDR Contact: 11/13/95
Database Release Frequency: No Update Planned Date of Next Scheduled EDR Contact: N/A

TRI COUNTY:

Tri-County Area Solid Waste Facilities List (Adams, Arapahoe and Douglas Counties)

Source: Tri-County Health Department

Telephone: 303-761-1340

Date of Government Version: 10/15/83

Date of Last EDR Contact: 01/27/95

Date of Next Scheduled EDR Contact: N/A

Date of Next Scheduled EDR Contact: N/A

WELD COUNTY:

Disposal & Treatment Sites

Source: Weld County Health Department

Telephone: 970-353-0586

Date of Government Version: 11/01/95

Date of Last EDR Contact: 11/13/95

Date of Next Scheduled EDR Contact: N/A

EDR PROPRIETARY HISTORICAL DATABASES

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

Disclaimer Provided by Real Property Scan, Inc.

The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines/Electrical Transmission Lines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines and electrical transmission lines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

STREET AND ADDRESS INFORMATION

© 2001 Geographic Data Technology, Inc., Rel. 07/2001. This product contains proprietary and confidential property of Geographic Data Technology, Inc. Unauthorized use, including copying for other than testing and standard backup procedures, of this product is expressly prohibited.

GEOCHECK®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

SOUTH BUCKLEY AFB ASPEN STREET AURORA, CO 80011

TARGET PROPERTY COORDINATES

Latitude (North): 39.703701 - 39° 42' 13.3" Longitude (West): 104.767502 - 104° 46' 3.0"

Universal Tranverse Mercator: Zone 13 UTM X (Meters): 519932.2 UTM Y (Meters): 4394688.0

EDR's GeoCheck Physical Setting Source Addendum has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

Assessment of the impact of contaminant migration generally has two principle investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

USGS TOPOGRAPHIC MAP ASSOCIATED WITH THIS SITE

Target Property: 2439104-F7 FITZSIMONS, CO

Source: USGS 7.5 min quad index

GENERAL TOPOGRAPHIC GRADIENT AT TARGET PROPERTY

Target Property: General NW

Source: General Topographic Gradient has been determined from the USGS 1 Degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

FEMA Flood

Target Property County Electronic Data

ARAPAHOE, CO YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 0800020185J

Additional Panels in search area: 0800020205J

NATIONAL WETLAND INVENTORY

NWI Electronic

NWI Quad at Target Property Data Coverage

FITZSIMONS YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 2.000 Miles.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

LOCATION GENERAL DIRECTION
FROM TP GROUNDWATER FLOW
19 1 - 2 Miles East SE

For additional site information, refer to Physical Setting Source Map Findings.

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

GEOLOGIC AGE IDENTIFICATION

Era: Cenozoic Category: Continental Deposits

System: Tertiary Series: Paleocene

Code: Txc (decoded above as Era, System & Series)

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: FLUVAQUENTS

Soil Surface Texture: gravelly - loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high

water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly. Soils may have a saturated zone, a layer of low hydraulic

conductivity, or seepage. Depth to water table is less than 1 foot.

Hydric Status: Soil meets the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

Soil Layer Information								
Boundary		ındary		Classification				
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)	
1	0 inches	6 inches	gravelly - loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COURSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel. COURSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel.	Max: 20.00 Min: 0.60	Max: 7.30 Min: 5.60	
2	6 inches	60 inches	stratified	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COURSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 20.00 Min: 0.60	Max: 7.30 Min: 5.60	

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: fine sandy loam

loamy coarse sand

loam clay loam

Surficial Soil Types: fine sandy loam

loamy coarse sand

loam clay loam

Shallow Soil Types: silty clay

Deeper Soil Types: gravelly - coarse sand

very fine sandy loam

coarse sand very gravelly - sand gravelly - sand fine sandy loam silty clay loam

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE SEARCH DISTANCE (miles)

Federal USGS

Federal FRDS PWS Nearest PWS within 1 mile

State Database 1.000

FEDERAL USGS WELL INFORMATION

LOCATION MAP ID WFII ID FROM TP No Wells Found

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

LOCATION MAP ID WELL ID FROM TP

No PWS System Found

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

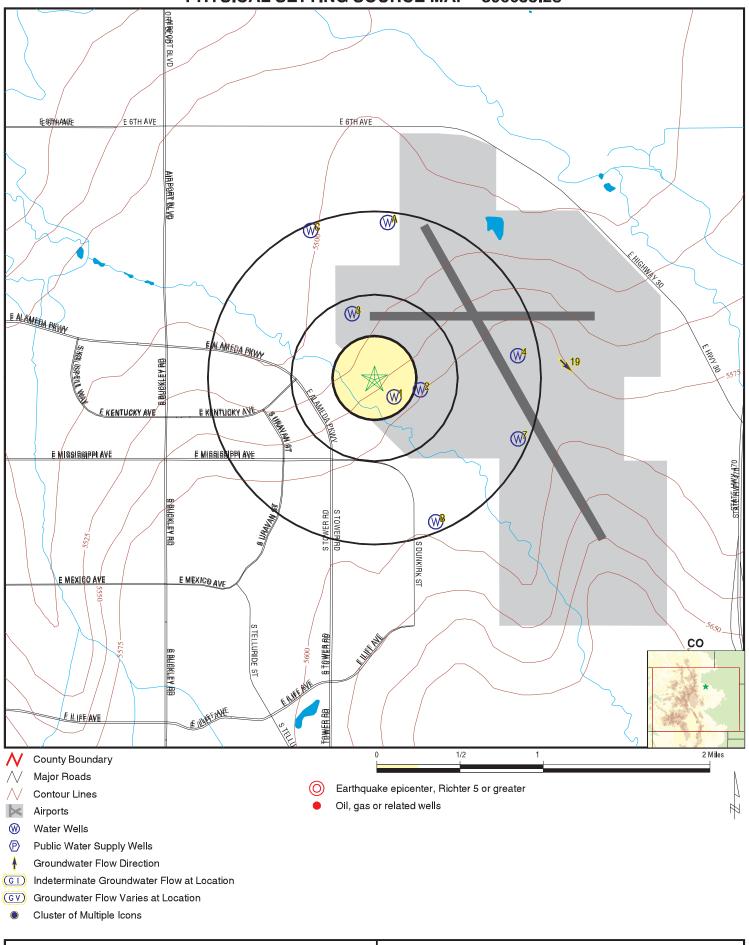
MAP ID	WELL ID	LOCATION FROM TP
1	COWW028383	1/8 - 1/4 Mile SE
2	COWW034746	1/4 - 1/2 Mile ESE
3	COWW261366	1/4 - 1/2 Mile NNW
4	COWW037460	1/2 - 1 Mile East
A5	COWW040695	1/2 - 1 Mile North
A6	COWW034998	1/2 - 1 Mile North
7	COWW023115	1/2 - 1 Mile ESE
A8	COWW260531	1/2 - 1 Mile North
B9	COWW048220	1/2 - 1 Mile SSE
B10	COWW048221	1/2 - 1 Mile SSE
B11	COWW048222	1/2 - 1 Mile SSE
A12	COWW039143	1/2 - 1 Mile North
C13	COWW020403	1/2 - 1 Mile NNW
C14	COWW003579	1/2 - 1 Mile NNW

GEOCHECK[®] - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
C15	COWW084155	1/2 - 1 Mile NNW
C16	COWW035265	1/2 - 1 Mile NNW
A17	COWW039142	1/2 - 1 Mile North
A18	COWW039141	1/2 - 1 Mile North

PHYSICAL SETTING SOURCE MAP - 896033.2s



TARGET PROPERTY: South Buckley AFB CUSTOMER: Geo-Marine ADDRESS: Aspen Street CONTACT: Donna DeYoung CITY/STATE/ZIP: Aurora CO 80011 INQUIRY#: 896033.2s LAT/LONG: 39.7037 / 104.7675 DATE: December 11, 2002 12:55 pm

Map ID Direction Distance

Elevation Database EDR ID Number

SE CO WELLS COWW028383

1/8 - 1/4 Mile Higher

Site Name: CO DEPT MILITARY AFFAIRS
Mailing Address: % GROUND WATER SOLID WAST
% GROUND WATER SOLID WAST

ABRDN PROV GRND, MD 21010 - 5422

Telephone: Not Reported

Water Division:1County Code:3Receipt:0028319Permit Number:28319Suffix Code:MHReplacement Code:Not Reported

Valid Well: Yes Parcel: 0

Application Date: 06/03/1996

Application Status: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Permit Status: Not Reported Permit Stat Date: Not Reported

Last Action Updated: Well construction report received

Last Action Date: 07/27/1998

Permit, Denial (AD) or Monitoring Hole Issued: 06/05/1996 Construction/Test report Received by DWR: 12/09/1996

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

O Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: 09/05/1996 Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0047
Depth to Base of Last Perforated Casing: 0057

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: Total Depth of Well: 57 Depth to Static Water Level: 56 Ground Surface Elevation: 5579 Acres Irrigated: 0 Totaling Flow Meter Regd., Installed: Ν Cross Reference to Another Well or Record: 211517 Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aguifer: Not Reported Well ID Number: 00000

Well Construction Completed Date: 06/15/1996
Pump Installation Completed Date: Not Reported
Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

Not Reported

Not Reported

Not Reported

Last Staff Member to Update File: RJG Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00
Principal Meridian: S Dist from Section Line: 0 0
Range: 0660W Township: 040S
Section: 15 1/4 Section: SW

1/4 1/4: NE 1/4 1/4: Not Reported

GW 2nd Aquifer: Not Reported Aquifer: Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Not Reported Approval Engineer: Designation Number: Not Reported

Comments: Not Reported Utm_x: 520168.781

Utm_y: 4394506.5 Loc_source: CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

2 ESE CO WELLS COWW034746

1/4 - 1/2 Mile Higher

Site Name: COLO DEPT OF MILITARY AFFAIRS

Mailing Address: AGINS CEV STOP 26 AGINS CEV STOP 26

AGINS CEV STOP 26 AURORA, CO 80011 - 9557

Telephone: 3036779160

Water Division:1County Code:3Receipt:0033595IPermit Number:211517Suffix Code:Not ReportedReplacement Code:Not Reported

Valid Well: Yes Parcel:

Application Date: 06/04/1998
Application Status: Well permit issued
Permit Status: Not Reported
Permit Stat Date: Not Reported
Last Action Updated: Well permit issued
Last Action Date: 07/27/1998

Permit, Denial (AD) or Monitoring Hole Issued: 07/24/1998 Construction/Test report Received by DWR: 12/09/1996

Well Proposed Yield (Gal/Min): 15
Well Proposed Depth (Feet): 57
Proposed Annual Appropriation (Acre Feet): 0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Not Reported Date Statement of Use Received: Date Amended to Include Animals: Not Reported 07/24/2000 Permit Expiration Date: Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0048
Depth to Base of Last Perforated Casing: 0058

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

0

Cross Reference to Another Well or Record:

Notice of Well Completion Recvd. for Non-trib Aquifer:

Notice of Beneficial Use Recvd. for Non-trib Aquifer:

Well ID Number:

Well Construction Completed Date:

028319MH

Not Reported

Not Reported

00000

06/15/1996

Well Construction Completed Date: 06/15/1996
Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No Contractor's License: SELF

Pump Installer's License: Not Reported

Pump Installation Report to DWR: Not Reported

Statute Which Permit Issued Under: 6023 RJG Last Staff Member to Update File: Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00

2200S 2800W Principal Meridian: Dist from Section Line: Range: 0660W Township: 040S Section: 15 1/4 Section: SW

1/4 1/4: NE 1/4 1/4 1/4: Not Reported Not Reported Aquifer: GW 2nd Aquifer: Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Approval Engineer: JLV **Designation Number:** AASF 1

Comments: Not Reported 520422.656 Utm_x:

Loc_source: CarteView 2/17/2000 4394575.5 Utm_y:

Usage: Q, Monitoring Well (Permitted)

NNW **CO WELLS** COWW261366 1/4 - 1/2 Mile

Not Reported

3

Lower

Site Name: KIBBLE ALBERT F Mailing Address: 2290 TOWER RD AURORA, CO 80211

Telephone: Not Reported

Water Division: County Code:

Receipt: 9007078 Permit Number: 50376 Suffix Code: Not Reported Replacement Code: Not Reported

Parcel: Valid Well: Yes

Application Date: Not Reported Application Status: Not Reported Permit Status: Not Reported Permit Stat Date: Not Reported Last Action Updated: Not Reported Last Action Date: Not Reported

Plugged an Abandoned Date:

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min): 0 Well Proposed Depth (Feet): 0 Proposed Annual Appropriation (Acre Feet): 0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: 10/06/1971 Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported

Annual Appropriation in Acre Feet: 0 Depth to Top of 1st Perforated Casing: 0000 Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: 10 Total Depth of Well: 630 Depth to Static Water Level: 375 Ground Surface Elevation: 0 Acres Irrigated: 0 Totaling Flow Meter Reqd., Installed: Ν

Cross Reference to Another Well or Record: Not Reported

Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: 00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Not Reported
Pump Installation Report to DWR:

Not Reported
Statute Which Permit Issued Under:

Last Staff Member to Update File:

Water District:

Not Reported
Not Reported
Not Reported

Groundwater Basin Numb:00Basin Mgmt Dist Numb:00Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:151/4 Section:NW

1/4 1/4: NW 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Not Reported Sub Division: Not Reported Lot Number: Block Number: Not Reported Filing Number: Not Reported Not Reported **Designation Number:** Not Reported Approval Engineer:

Comments: Not Reported Utm_x: 519760.688

Utm_y: 4395309.5 Loc_source: CarteView 2/17/2000

Usage: Domestic

Higher

Site Name: AIR NATIONAL GARD

Mailing Address: % ENVIRONMENTAL RESOURCES % ENVIRONMENTAL RESOURCES

GREENWOOD VILLA, CO 80209

Telephone: 3037415050

Water Division: 1 County Code: 3
Receipt: 0036215 Permit Number: 36215
Suffix Code: MH Replacement Code: Not Reported

Valid Well: No Parcel: 0

Application Date: 05/24/1999

Application Status: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Permit Status: Not Reported Permit Stat Date: Not Reported

Last Action Updated: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Last Action Date: 08/10/1999

Permit, Denial (AD) or Monitoring Hole Issued: 05/26/1999
Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

40

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Not reported First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: 08/24/1999 Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000

Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

0

Cross Reference to Another Well or Record:

Not Reported

Notice of Well Completion Recvd. for Non-trib Aquifer:

Not Reported

Pump Installation Completed Date:

Not Reported

Last Staff Member to Update File: RCB Water District: 02

Groundwater Basin Numb:00Basin Mgmt Dist Numb:00Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:141/4 Section:NW

1/4 1/4: SW 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Not Reported Sub Division: Not Reported Lot Number: Block Number: Not Reported Filing Number: Not Reported Approval Engineer: **RCB** Designation Number: Not Reported

Comments: Not Reported Utm_x: 521362.781

Utm_y: 4394908 Loc_source: CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

Site Name: BUCKLEY AIR NATIONAL GUARD BASE

Mailing Address: C/O SAIC

Lower

C/O SAIC

LAKEWOOD, CO 80228

Telephone: 3039696000

Water Division:1County Code:3Receipt:0038912Permit Number:38912Suffix Code:MHReplacement Code:Not Reported

Valid Well: No Parcel: 0

Application Date: 10/03/2000

Application Status: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Permit Status: Not Reported Permit Stat Date: Not Reported

Last Action Updated: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Last Action Date: 10/03/2000

Permit, Denial (AD) or Monitoring Hole Issued: 10/03/2000 Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

30

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported

Well Type:

First Beneficial Use Date:

Date Statement of Use Received:

Date Amended to Include Animals:

Permit Expiration Date:

Abandonment Report Received:

Plugged an Abandoned Date:

Not reported

Not Reported

Not Reported

Not Reported

Annual Appropriation in Acre Feet:

Depth to Top of 1st Perforated Casing:

Depth to Base of Last Perforated Casing:

0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

0

Cross Reference to Another Well or Record:

Not Reported

Notice of Well Completion Recvd. for Non-trib Aquifer:

Not Reported

00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received:

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

No

No

No

No

Not Reported

Not Reported

Last Staff Member to Update File: ADS Water District: 02

Groundwater Basin Numb:00Basin Mgmt Dist Numb:0Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:101/4 Section:SW

1/4 1/4: NE 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Not Reported Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Approval Engineer: Not Reported **Designation Number:** Not Reported

Comments: 3 WELLS Utm_x: 520156.844

Utm_y: 4396112 Loc_source: CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

A6
North CO WELLS COWW034998

1/2 - 1 Mile Lower

Site Name: US AIR FORCE

Mailing Address: C/O GEOTECH ENV SVCS INC C/O GEOTECH ENV SVCS INC

ELGIN, IL 60120

Telephone: 8479318235

Water Division:1County Code:3Receipt:0033830Permit Number:33830Suffix Code:MHReplacement Code:Not Reported

Valid Well: No Parcel: 0

Application Date: 06/26/1998

Application Status: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Permit Status: Not Reported

Permit Stat Date: Not Reported

Last Action Updated: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Last Action Date: 07/07/1998

Permit, Denial (AD) or Monitoring Hole Issued: 07/02/1998
Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: 09/26/1998 Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

0

Cross Reference to Another Well or Record:

Not Reported

Notice of Well Completion Recvd. for Non-trib Aquifer:

Not Reported

Pump Installation Completed Date:

Geophysical is Required and Received:

No
No

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

AUTH

Not Reported

Not Reported

Not Reported

Last Staff Member to Update File: RAB Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00
Principal Meridian: S Dist from Section Line: 0 0
Range: 0660W Township: 040S
Section: 10 1/4 Section: SW

1/4 1/4 1/4: 1/4 1/4: NE Not Reported Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Not Reported Approval Engineer: Designation Number: Not Reported

Comments: Not Reported Utm_x: 520156.844

Utm_y: 4396112 Loc_source: CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

/ ESE 1/2 - 1 Mile Higher

CO WELLS COWW023115

Site Name: DIAMOND SHAMROCK
Mailing Address: C/O APPLIED ECOSYSTEMS
C/O APPLIED ECOSYSTEMS

DENVER, CO 80202

Telephone: 3034468470

Water Division:1County Code:3Receipt:0024109Permit Number:24109Suffix Code:MHReplacement Code:Not Reported

Valid Well: No Parcel: 0

Application Date: 08/17/1994

Application Status: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Permit Status: Not Reported Permit Stat Date: Not Reported

Last Action Updated: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Last Action Date: 08/25/1994

Permit, Denial (AD) or Monitoring Hole Issued: 08/19/1994
Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

O Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Not Reported Date Statement of Use Received: Date Amended to Include Animals: Not Reported Permit Expiration Date: 11/19/1994 Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

0

Cross Reference to Another Well or Record:

Not Reported
Notice of Well Completion Recvd. for Non-trib Aquifer:
Not Reported

Geophysical is Required and Received:

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

Last Staff Member to Update File:

No

No

No

Not Reported

Not Reported

JLV

Water District: JLV

United Start Member to Opdate File: JLV

United Start Member to Opdate File: JLV

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00 Principal Meridian: S Dist from Section Line: 00 0660W Township: 040S Range: Section: 14 1/4 Section: SW 1/4 1/4: SW 1/4 1/4 1/4:

Not Reported Aquifer: 2nd Aquifer: Not Reported GW Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Not Reported Approval Engineer: Designation Number: Not Reported

Comments: Not Reported Utm_x: 521368.781

Utm_y: 4394104 Loc_source: CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

A8
North
CO WELLS COWW260531
1/2 - 1 Mile

Lower

Site Name: CO AIR NATIONAL GUARD Mailing Address: BUCKLEY ANG BASE

DENVER, CO 0

Telephone: Not Reported

Water Division:1County Code:3Receipt:9006206Permit Number:16117Suffix Code:RReplacement Code:Not Reported

Valid Well: No Parcel:

Application Date: Not Reported Application Status: Not Reported Permit Status: Not Reported Permit Stat Date: Not Reported

Last Action Updated: Record change. A portion of the file was modified

Last Action Date: 09/23/1992

Totaling Flow Meter Reqd., Installed:

Permit, Denial (AD) or Monitoring Hole Issued: Not Reported Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

O Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Non-exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Not Reported Permit Expiration Date: Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number:

Yield in Gallons Per Minute:

110

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Not Reported

110

2100

0

0

0

Cross Reference to Another Well or Record:

Not Reported

Notice of Well Completion Recvd. for Non-trib Aquifer:

Not Reported

00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

Not Reported

Not Reported

Not Reported

Last Staff Member to Update File: RAB Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00

Principal Meridian:SDist from Section Line:2250S 1750WRange:0660WTownship:040SSection:101/4 Section:SW

Ν

1/4 1/4: NE 1/4 1/4: Not Reported

Aquifer: KA 2nd Aquifer: KLF

Sub Division:Not ReportedLot Number:Not ReportedBlock Number:Not ReportedFiling Number:Not ReportedApproval Engineer:Not ReportedDesignation Number:Not Reported

Comments: Not Reported Utm_x: 520091.75

Utm_y: 4396196 Loc_source: CarteView 2/17/2000

Usage: Municipal

B9 SC CO WELLS COWW048220

1/2 - 1 Mile Higher

Site Name: ENVIRONMENTAL DEVELOPERS I

Mailing Address: Not Reported

DENVER, CO 80232

Telephone: Not Reported

Water Division:0County Code:3Receipt:0073542APermit Number:7066Suffix Code:ADReplacement Code:Not Reported

Valid Well: No Parcel:

Application Date: Not Reported

Application Status: Application denied. Denial number in permit number

Permit Status: Not Reported Permit Stat Date: Not Reported

Last Action Updated: Application denied. Denial number in permit number

Last Action Date: 11/07/1988

Permit, Denial (AD) or Monitoring Hole Issued: 12/09/1977
Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Non-exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Regd., Installed:

0

Cross Reference to Another Well or Record:
Notice of Well Completion Recvd. for Non-trib Aquifer:
Notice of Beneficial Use Recvd. for Non-trib Aquifer:
Well ID Number:

Not Reported
Not Reported
Not Reported
00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License: Not Reported Pump Installer's License: Not Reported

Pump Installation Report to DWR: Not Reported Statute Which Permit Issued Under: Not Reported Last Staff Member to Update File: Not Reported

Water District: 00

Groundwater Basin Numb:00Basin Mgmt Dist Numb:00Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:221/4 Section:NE

SW 1/4 1/4: 1/4 1/4 1/4: Not Reported Not Reported Aquifer: GW 2nd Aquifer: Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Approval Engineer: Not Reported **Designation Number:** Not Reported

Comments: Not Reported Utm_x: 520573.906

Utm_y: 4393300 Loc_source: CarteView 2/17/2000

Usage: Crop Irrigation

R10

SSE 1/2 - 1 Mile Higher

Site Name: ENVIRONMENTAL DEVELOPERS I

Mailing Address: Not Reported

DENVER, CO 80232

Telephone: Not Reported

Water Division:0County Code:3Receipt:0073542BPermit Number:7067Suffix Code:ADReplacement Code:Not Reported

Valid Well: No Parcel: 0

Application Date: Not Reported

Application Status: Application denied. Denial number in permit number

Permit Status: Not Reported
Permit Stat Date: Not Reported

Last Action Updated: Application denied. Denial number in permit number

Last Action Date: 11/07/1988

Permit, Denial (AD) or Monitoring Hole Issued: 12/09/1977
Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

O Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Non-exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

0

Cross Reference to Another Well or Record: Not Reported

CO WELLS

COWW048221

Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: Not Reported 00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Not Reported

Output

Not Reported

Not Reported

Not Reported

Groundwater Basin Numb:00Basin Mgmt Dist Numb:00Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:221/4 Section:NE

1/4 1/4: SW 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Lot Number: Not Reported Not Reported Block Number: Not Reported Filing Number: Not Reported Approval Engineer: Designation Number: Not Reported Not Reported

Comments: Not Reported Utm_x: 520573.906

Utm_y: 4393300 Loc_source: CarteView 2/17/2000

Usage: Crop Irrigation

B11
SSE CO WELLS COWW048222

1/2 - 1 Mile Higher

Site Name: ENVIRONMENTAL DEVELOPERS I

Mailing Address: Not Reported

DENVER, CO 80232

Telephone: Not Reported

Water Division: 0 County Code: 3
Receipt: 0073542C Permit Number: 7068

Suffix Code: AD Replacement Code: Not Reported

Valid Well: No Parcel:

Application Date: Not Reported

Application Status: Application denied. Denial number in permit number

Permit Status: Not Reported
Permit Stat Date: Not Reported

Last Action Updated: Application denied. Denial number in permit number

Last Action Date: 11/07/1988

Permit, Denial (AD) or Monitoring Hole Issued: 12/09/1977
Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min): 0
Well Proposed Depth (Feet): 0
Proposed Annual Appropriation (Acre Feet): 0

Well Application Type: Not reported Well Type: Non-exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet:

Depth to Top of 1st Perforated Casing:

Depth to Base of Last Perforated Casing:

0000

Depth to Base of Last Perforated Casing:

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Regd., Installed:

N

Cross Reference to Another Well or Record:

Not Reported

Notice of Well Completion Recvd. for Non-trib Aquifer:

Not Reported

00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

Last Staff Member to Update File:

Not Reported

Not Reported

Not Reported

Not Reported

Water District: 00

Groundwater Basin Numb:00Basin Mgmt Dist Numb:00Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:221/4 Section:NE

1/4 1/4: SW 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Not Reported Filing Number: Not Reported Block Number: Approval Engineer: Not Reported **Designation Number:** Not Reported

Comments: Not Reported Utm_x: 520573.906

 Utm_y:
 4393300
 Loc_source:
 CarteView 2/17/2000

Usage: Crop Irrigation

A12
North CO WELLS COWW039143

1/2 - 1 Mile Lower

Site Name: BUCKLEY AIR NATL GUARD BASE

Mailing Address: 18500 EAST 6TH AVE AURORA, CO 80011

Telephone: 3036776308

Water Division: 1 County Code: 3

Receipt:0037633CPermit Number:224562Suffix Code:Not ReportedReplacement Code:Not Reported

Valid Well: No Parcel: 0

Application Date: 01/19/2000
Application Status: Well permit issued
Permit Status: Not Reported
Permit Stat Date: Not Reported
Last Action Updated: Well permit issued
Last Action Date: 03/28/2000

Permit, Denial (AD) or Monitoring Hole Issued: 03/28/2000 Construction/Test report Received by DWR: 01/19/2000

Well Proposed Yield (Gal/Min): 0
Well Proposed Depth (Feet): 26
Proposed Annual Appropriation (Acre Feet): 0

Well Application Type: Not reported Well Type: Not reported First Beneficial Use Date: Not Reported

Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported 03/28/2002 Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date:

Annual Appropriation in Acre Feet: Depth to Top of 1st Perforated Casing: 0000 Depth to Base of Last Perforated Casing: 0000

Not Reported Water Court Case Number:

Yield in Gallons Per Minute: Total Depth of Well: 0 Depth to Static Water Level: 0 Ground Surface Elevation: 0 Acres Irrigated: 0 Totaling Flow Meter Regd., Installed: Ν

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: 00000 Well Construction Completed Date: 09/13/1999 Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No Contractor's License: **AUTH** Pump Installer's License: Not Reported Pump Installation Report to DWR: Not Reported

Statute Which Permit Issued Under: 6023 SMJ Last Staff Member to Update File: Water District: 02

Basin Mgmt Dist Numb: Groundwater Basin Numb: 00

Dist from Section Line: 2295S 1750W Principal Meridian: S Range: 0660W Township: 040S

Section: 10 1/4 Section: SW NE

1/4 1/4 1/4: Not Reported 1/4 1/4: Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Approval Engineer: MTT Designation Number: **SA-06**

Comments: Not Reported 520091.75 Utm_x:

Utm_y: 4396210 Loc_source: CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

NNW 1/2 - 1 Mile Lower

Site Name: COLORADO AIR NATIONAL GUARD Mailing Address: C/O PACIFIC WESTERN TECH

> C/O PACIFIC WESTERN TECH **GOLDEN, CO 80401**

Telephone: 3032780660

Water Division: County Code: Receipt: 0021877 Permit Number: 21877 Suffix Code: Replacement Code: MH Not Reported

Parcel: Valid Well: No

Application Date: 11/11/1993

Monitoring hole notice of construction. File number and date entered in permit number and permit date fields Application Status:

Permit Status: Not Reported Permit Stat Date: Not Reported

Last Action Updated: Record change. A portion of the file was modified **CO WELLS**

COWW020403

Last Action Date: 11/19/1993
Permit, Denial (AD) or Monitoring Hole Issued: 11/15/1993
Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

O Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: 02/15/1994 Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet:

Depth to Top of 1st Perforated Casing:

Depth to Base of Last Perforated Casing:

0000

Depth to Base of Last Perforated Casing:

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

N

Cross Reference to Another Well or Record:
Notice of Well Completion Recvd. for Non-trib Aquifer:
Notice of Beneficial Use Recvd. for Non-trib Aquifer:
Well ID Number:
Well Construction Completed Date:
Not Reported
Not Reported
00000
Not Reported

Pump Installation Completed Date: Not Reported Geophysical is Required and Received: No

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

Statute Which Permit Issued Under:

AUTH

Not Reported

Not Reported

Not Reported

Last Staff Member to Update File: JLV Water District: 02

Groundwater Basin Numb:00Basin Mgmt Dist Numb:00Principal Meridian:SDist from Section Line:0 0Range:0660WTownship:040SSection:091/4 Section:SE

Not Reported 1/4 1/4: NE 1/4 1/4 1/4: Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Approval Engineer: Not Reported **Designation Number:** Not Reported

Comments: Not Reported Utm_x: 519357.313

Lower

 Utm_y:
 4396113
 Loc_source:
 CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

C14 NNW 1/2 - 1 Mile

CO WELLS COWW003579

Site Name: US AIR FORCE

Mailing Address: 2D COMMUNICATIONS SQADRON

BUCKLEY ANGB, CO 80011

Telephone: Not Reported

Water Division:1County Code:3Receipt:0006616Permit Number:25395Suffix Code:FReplacement Code:Not Reported

Valid Well: No Parcel:

Application Date: 05/14/1981

Application Status: Expired well permit Permit Status: Expired well permit Permit Stat Date: 07/17/1982

Last Action Updated: Expired well permit Last Action Date: 09/13/1988

Permit, Denial (AD) or Monitoring Hole Issued: 07/17/1981
Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

O Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Non-exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Not Reported Date Amended to Include Animals: Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

N

Cross Reference to Another Well or Record:
Not Reported
Notice of Well Completion Recvd. for Non-trib Aquifer:
Not Reported
Notice of Beneficial Use Recvd. for Non-trib Aquifer:
Well ID Number:
Well Construction Completed Date:
Pump Installation Completed Date:
Not Reported

Geophysical is Required and Received: No Contractor's License: LIC

 Pump Installer's License:
 Not Reported

 Pump Installation Report to DWR:
 Not Reported

 Statute Which Permit Issued Under:
 Not Reported

 Last Staff Member to Update File:
 Not Reported

Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00 Principal Meridian: S Dist from Section Line: 0 0 Range: 0660W Township: 040S SE Section: 09 1/4 Section: 1/4 1/4: NE 1/4 1/4 1/4: Not Reported

Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Approval Engineer: Not Reported Designation Number: SEE 26896-F

Comments: Not Reported

Utm_x: 519357.313

 Utm_y:
 4396113
 Loc_source:
 CarteView 2/17/2000

Usage: Q

Map ID Direction Distance

EDR ID Number Elevation Database

NNW **CO WELLS** COWW084155

1/2 - 1 Mile Lower

> Site Name: **US AIR FORCE**

2D COMMUNICATION SQUADRON Mailing Address:

BUCKLEY ANGB, CO 80011

Telephone: Not Reported

Water Division: County Code: 3 Receipt: 0238115 Permit Number: 26896 Suffix Code: F Replacement Code: Not Reported

Parcel: Valid Well: Nο

Application Date: 07/25/1983

Application Status: Canceled well permit. Code and date also entered in status and date fields Canceled well permit. Code and date also entered in status and date fields Permit Status:

Permit Stat Date: 10/13/1984

Last Action Updated: Canceled well permit. Code and date also entered in status and date fields

02/07/1991 Last Action Date:

Permit, Denial (AD) or Monitoring Hole Issued: 10/13/1983 Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min): 0 Well Proposed Depth (Feet): 0 Proposed Annual Appropriation (Acre Feet):

Well Application Type: Not reported Well Type: Non-exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported Permit Expiration Date: Not Reported Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0 Depth to Top of 1st Perforated Casing: 0000 Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute: Total Depth of Well: 0 Depth to Static Water Level: 0 0 Ground Surface Elevation: 0 Acres Irrigated: Totaling Flow Meter Reqd., Installed: Ν

Cross Reference to Another Well or Record: 032059F Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Well ID Number: 00000 Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No

Not Reported Contractor's License: Pump Installer's License: Not Reported Not Reported Pump Installation Report to DWR: Statute Which Permit Issued Under: Not Reported Not Reported Last Staff Member to Update File: 02

Water District:

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00 Principal Meridian: S Dist from Section Line: 0 0 0660W 040S Range: Township: 1/4 Section: Section: 09 SE

1/4 1/4: NE 1/4 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported

Sub Division:Not ReportedLot Number:Not ReportedBlock Number:Not ReportedFiling Number:Not ReportedApproval Engineer:Not ReportedDesignation Number:SEE 32059-F

Comments: Not Reported Utm_x: 519357.313

 Utm_y:
 4396113
 Loc_source:
 CarteView 2/17/2000

Usage: Industrial

C16
NNW
CO WELLS COWW035265
1/2 - 1 Mile

1/2 - 1 N Lower

Site Name: BUCKLEY AIR NATIONAL GUARD BASE

Mailing Address: % RADIAN INTERNATIONAL

% RADIAN INTERNATIONAL

DENVER, CO 80202

Telephone: 3032920800

Water Division:1County Code:3Receipt:0034074Permit Number:34074Suffix Code:MHReplacement Code:Not Reported

Valid Well: No Parcel: 0

Application Date: 07/29/1998

Application Status: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Permit Status: Not Reported
Permit Stat Date: Not Reported

Last Action Updated: Monitoring hole notice of construction. File number and date entered in permit number and permit date fields

Last Action Date: 08/04/1998

Permit, Denial (AD) or Monitoring Hole Issued: 07/29/1998 Construction/Test report Received by DWR: Not Reported

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

60

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Exempt First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Date Amended to Include Animals: Not Reported 10/29/1998 Permit Expiration Date: Abandonment Report Received: Not Reported Not Reported Plugged an Abandoned Date:

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

0

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: 00000

Well Construction Completed Date: Not Reported Pump Installation Completed Date: Not Reported

Geophysical is Required and Received: No Contractor's License: AUTH

Pump Installer's License: Not Reported Pump Installation Report to DWR: Not Reported

GEOCHECK®-PHYSICAL SETTING SOURCE MAP FINDINGS

Statute Which Permit Issued Under: Not Reported

Last Staff Member to Update File: KMG

Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 00
Principal Meridian: S Dist from Section Line: 0 0
Range: 0660W Township: 040S
Section: 09 1/4 Section: SE

1/4 1/4: NE 1/4 1/4 1/4: Not Reported Not Reported Aquifer: GW 2nd Aquifer: Sub Division: Not Reported Lot Number: Not Reported Not Reported Block Number: Filing Number: Not Reported Approval Engineer: Not Reported **Designation Number:** Not Reported

Comments: Not Reported Utm_x: 519357.313

Utm_y: 4396113 Loc_source: CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

A17
North
CO WELLS COWW039142
1/2 - 1 Mile

Lower

Site Name: BUCKLEY AIR NATL GUARD BASE

Mailing Address: 18500 EAST 6TH AVE AURORA, CO 80011

Telephone: 3036776308

Water Division:1County Code:3Receipt:0037633BPermit Number:224561Suffix Code:Not ReportedReplacement Code:Not Reported

Valid Well: No Parcel: 0

Application Date: 01/19/2000
Application Status: Well permit issued
Permit Status: Not Reported
Permit Stat Date: Not Reported
Last Action Updated: Well permit issued

Last Action Date: 03/28/2000

Permit, Denial (AD) or Monitoring Hole Issued: 03/28/2000 Construction/Test report Received by DWR: 01/19/2000

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

30

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Not reported First Beneficial Use Date: Not Reported Not Reported Date Statement of Use Received: Date Amended to Include Animals: Not Reported Permit Expiration Date: 03/28/2002 Abandonment Report Received: Not Reported Not Reported Plugged an Abandoned Date:

Annual Appropriation in Acre Feet:

Depth to Top of 1st Perforated Casing:

Depth to Base of Last Perforated Casing:

0000

Water Court Case Number: Not Reported

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

0

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported

GEOCHECK®-PHYSICAL SETTING SOURCE MAP FINDINGS

Notice of Beneficial Use Recvd. for Non-trib Aquifer: Not Reported Well ID Number: 00000

Well ID Number: 00000
Well Construction Completed Date: 09/05/1999
Pump Installation Completed Date: Not Reported

Geophysical is Required and Received:

Contractor's License:

Pump Installer's License:

Pump Installation Report to DWR:

No

No

Not Reported

Not Reported

Statute Which Permit Issued Under: 6023
Last Staff Member to Update File: SMJ
Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 0

Principal Meridian:SDist from Section Line:2460S 1590WRange:0660WTownship:040SSection:101/4 Section:SW

Not Reported 1/4 1/4: NE 1/4 1/4 1/4: Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Not Reported Not Reported Block Number: Filing Number: Approval Engineer: MTT **Designation Number: SA-05**

Comments: Not Reported

Utm_x: 520042.969

Utm_y: 4396260 Loc_source: CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

A18
North
1/2 - 1 Mile
CO WELLS COWW039141

Lower

Site Name: BUCKLEY AIR NATL GUARD BASE

Mailing Address: 18500 EAST 6TH AVE AURORA, CO 80011

Telephone: 3036776308

Water Division: 1 County Code: 3
Receipt: 0037633A Permit Number: 224560
Suffix Code: Not Reported Replacement Code: Not Reported
Valid Well: No Parcel: 0

Valid Well:

Application Date:

Application Status:

Permit Status:

Permit Status:

Permit Stat Date:

Last Action Updated:

Volume 1/19/2000

Well permit issued

Well permit issued

Well permit issued

Well permit issued

03/28/2000

Permit, Denial (AD) or Monitoring Hole Issued: 03/28/2000 Construction/Test report Received by DWR: 01/19/2000

Well Proposed Yield (Gal/Min):

Well Proposed Depth (Feet):

30

Proposed Annual Appropriation (Acre Feet):

0

Well Application Type: Not reported Well Type: Not reported First Beneficial Use Date: Not Reported Date Statement of Use Received: Not Reported Not Reported Date Amended to Include Animals: 03/28/2002 Permit Expiration Date: Abandonment Report Received: Not Reported Plugged an Abandoned Date: Not Reported

Annual Appropriation in Acre Feet: 0
Depth to Top of 1st Perforated Casing: 0000
Depth to Base of Last Perforated Casing: 0000

Water Court Case Number: Not Reported

GEOCHECK®-PHYSICAL SETTING SOURCE MAP FINDINGS

Yield in Gallons Per Minute:

Total Depth of Well:

Depth to Static Water Level:

Ground Surface Elevation:

Acres Irrigated:

Totaling Flow Meter Reqd., Installed:

N

Cross Reference to Another Well or Record: Not Reported Notice of Well Completion Recvd. for Non-trib Aquifer: Not Reported Not Reported Notice of Beneficial Use Recvd. for Non-trib Aquifer: Well ID Number: 00000 Well Construction Completed Date: 09/13/1999 Pump Installation Completed Date: Not Reported Geophysical is Required and Received: No Contractor's License: **AUTH** Not Reported Pump Installer's License:

Pump Installation Report to DWR: Not Reported Statute Which Permit Issued Under: 6023
Last Staff Member to Update File: SMJ Water District: 02

Groundwater Basin Numb: 00 Basin Mgmt Dist Numb: 0

Principal Meridian:SDist from Section Line:2465S 1665WRange:0660WTownship:040SSection:101/4 Section:SW

NE 1/4 1/4 1/4: 1/4 1/4: Not Reported Aquifer: GW 2nd Aquifer: Not Reported Sub Division: Not Reported Lot Number: Not Reported Block Number: Not Reported Filing Number: Not Reported Approval Engineer: Designation Number: SA-04 MTT

Comments: Not Reported Utm_x: 520065.813

Utm_y: 4396262 Loc_source: CarteView 2/17/2000

Usage: Q, Monitoring Well (Permitted)

19 Shallow Water Depth: Not Reported
East Groundwater Flow: SE AQUIFLOW 8573

1 - 2 Miles Higher Deep Water Depth: Not Reported Date: 3/17/98

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for ARAPAHOE County: 1

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 80011

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor Living Area - 2nd Floor	Not Reported Not Reported	Not Reported Not Reported	Not Reported Not Reported	Not Reported Not Reported
Basement	7.000 pCi/L	33%	67%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOWR Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the national Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-260-2805

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-260-2805

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: In November 1971 the United States Geological Survey (USGS) implemented a national water resource information tracking system. This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on more than 900,000 wells, springs, and other sources of groundwater.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STATE RECORDS

Colorado GIS Well Database

Source: Office of State Engineer, Division of Water Resources

Telephone: 303-866-3581

The GIS Well database includes all wells that the Division of Water Resources permits.

Oil and Gas Well Locations

Source: Department of Natural Resources

Telephone: 303-894-2100

RADON

Area Radon Information

Source: USGS

Telephone: 303-202-4210

The National Radon Database has been developed by the U.S. Environmental Protection Agency

(USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 202-564-9370

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor

radon levels.

OTHER

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

APPENDIX E:

NOTICE OF AVAILABILITY AFFIDAVIT

APPENDICES				
	This page i	intentionally l	eft blank	
FINAL Environmental Assessn	nent			

THE Denver Newspaper Agency DENVER, CO

PUBLISHER'S AFFIDAVIT

City and County of Denver, STATE OF COLORADO,

Collene Curran

being of lawful
age and being first duly sworn upon oath, deposes and says:
Legal Advertising Reviewer
That he/she is the
That the notice, of which the annexed is a true copy, was published in The said newspaper to wit: (dates of publication)
Signature
L1+n
Subscribed and sworn to before me this
Of MARCH
Marie Bublie
Notary Public.
Ruston
Notary Public. My commission expires. PUBLIC OF COLORARIA

Interested parties are hereby notified that Buckley Air Force Base (BAFB) has prepared a Draff Environmental Assessment (EA) and a Draff Einding of No Significant Impact (EA) and a Draff Einding of No Significant Impact (FONS) for the proposed construction and operation of an H-70 fuel storage facility and a medical pharmacy at BAFB, Colorado.

Statutory Authority. This notice is being issued to interested parties in accordance with the National Environmental Policy Act (Public Law IPL] 91-90, 42 ronmental Policy Act (Public Law IPL] 91-90, 42 ronmental Policy Act (Public Law IPL] 91-90, 42 ronmental Policy Act (Public Law IPL) 91-90, 91-90, 91-90, 91-90, 91-90, 91-90, 91-90, 91-90, 91-90, 91-90, 91-90, 91-90, 91-90, 91-90, 91-90, 91-90, 91

A	P	PE	N	D	IX	\mathbf{F}	•

TRANSMITTAL LETTERS

APPENDICES	
,	This page intentionally left blank
FINAL Environmental Assessment	
I II WILL ENVIRONMENTAL ASSESSMENT	



GEO-MARINE, INC. ENGINEERING AND ENVIRONMENTAL SERVICES

27 February 2003

Librarian
Denver Public Library
Government Documents Section
10 West 14th Avenue
Denver, Colorado 80204

RE: Draft Environmental Assessment for the Proposed Construction of an H-70 Fuel Storage Facility and Medical Pharmacy at Buckley Air Force Base, Colorado Public Review Copy

Dear Librarian:

Please find enclosed a copy of the Draft Environmental Assessment prepared for the proposed construction of an H-70 fuel storage facility and a medical pharmacy at Buckley Air Force Base, Colorado. A notice of availability for this document has been published by the Denver Newspaper Agency in the local Denver newspapers. Please make this document available for public review from 03 March to 18 March 2003.

Please contact me at 972/423-5480 or via e-mail at rschneider@geo-marine.com, or Elise Sherva, 460 CES/CEVP, Buckley Air Force Base at 303/677-9077 with any questions. Thank you in advance for your assistance.

Sincerely,

Geo-Marine, Inc.

Rae Lynn Schneider NEPA Project Manager

Enclosures (1)

cc: Elise Sherva, BAFB





GEO-MARINE, INC. ENGINEERING AND ENVIRONMENTAL SERVICES

27 February 2003

Librarian Aurora Central Library 14949 East Alameda Drive Aurora, Colorado 80012

RE: Draft Environmental Assessment for the Proposed Construction of an H-70 Fuel Storage Facility and Medical Pharmacy at Buckley Air Force Base, Colorado Public Review Copy

Dear Librarian:

Please find enclosed a copy of the Draft Environmental Assessment prepared for the proposed construction of an H-70 fuel storage facility and a medical pharmacy at Buckley Air Force Base, Colorado. A notice of availability for this document has been published by the Denver Newspaper Agency in the local Denver newspapers. Please make this document available for public review from 03 March to 18 March 2003.

Please contact me at 972/423-5480 or via e-mail at <u>rschneider@geo-marine.com</u>, or Elise Sherva, 460 CES/CEVP, Buckley Air Force Base at 303/677-9077 with any questions. Thank you in advance for your assistance.

Sincerely,

Geo-Marine Inc

Rae Lynn Schneider NEPA Project Manager

Enclosures (1)

cc: Elise Sherva, BAFB





FEB 2 8 2003

Lt Col Alfred C. Scharff 660 S Aspen St, Stop 86 Buckley AFB CO 80011-9551

Lee Carlson State Supervisor 755 Parfet Street, Suite 361 Lakewood CO 80215

Dear Mr. Carlson

The Air Force has prepared a Draft Supplemental Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the construction and operation of a H-70 Fuels facility and a Medical Pharmacy. The H-70 fuels facility proposed action is required to provide safe storage, handling, and transportation of H-70 fuel. The medical pharmacy provides a centrally located pharmacy for military personnel, their dependents, and military retirees in the Denver metropolitan area. A copy of the Draft EA and FONSI are enclosed for your review and comment.

We are submitting the Draft EA and Draft FONSI per Section 7 of the Endangered Species Act and the National Environmental Policy Act. Please review and provide written comments within 30 calendar days of receipt of this letter to:

460 CES/CEV 660 S Aspen St, Stop 86 Buckley AFB CO 80011-9551

If you have any questions please feel free to contact Ms. Elise Sherva at 303-677-9077, Email <u>elise.sherva@buckley.af.mil</u> or Ms. Janet Wade at 303-677-9977, Email janet.wade@buckley.af.mil.

Sincerely

Base Civil Engineer

f Col. USAF



FEB 2 8 2003

Lt Col Alfred C. Scharff 660 S Aspen St, Stop 86 Buckley AFB CO 80011-9551

Eliza Moore Wildlife Manager Colorado Division of Wildlife 6060 S Broadway Denver CO 80216

Dear Ms. Moore

The Air Force has prepared a Draft Supplemental Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the construction and operation of a H-70 Fuels facility and a Medical Pharmacy. The H-70 fuels facility proposed action is required to provide safe storage, handling, and transportation of H-70 fuel. The medical pharmacy is to provide a centrally located pharmacy for military personnel, their dependents, and military retirees in the Denver metropolitan area. A copy of the Draft EA and FONSI are enclosed for your review and comment.

We are submitting the Draft EA and Draft FONSI per Section 7 of the Endangered Species Act and the National Environmental Policy Act. Please provide written comments within 30 calendar days of receipt of this letter to:

460 CES/CEV 660 S Aspen Street, Stop 86 Buckley AFB CO 80011-9551

If you have any questions please feel free to contact Ms. Elise Sherva at 303-677-9077, Email <u>elise.sherva@buckley.af.mil</u> or Ms. Janet Wade at 303-677-9977, Email janet.wade@buckley.af.mil.

Sincerely

Base Civil Engineer



FEB 2 8 2003

Lt Col Alfred C. Scharff 660 S Aspen St, Stop 86 Buckley AFB CO 80011-9551

Cynthia Cody NEPA Unit Chief U.S. Environmental Protection Agency, Region 8 999 18th Street, Suite 500 Denver CO 80202

Dear Ms. Cody

The Air Force has prepared a Draft Supplemental Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the construction and operation of a H-70 Fuels facility and a Medical Pharmacy. The H-70 facility proposed action is required to provide safe storage, handling, and transportation of H-70 fuel. The Medical Pharmacy provides a centrally located pharmacy for military personnel, their dependents, and military retirees in the Denver metropolitan area. A copy of the Draft EA and FONSI are enclosed for your review and comment.

Please provide written comments within 30 calendar days of receipt of this letter to:

460 CES/CEV 660 S Aspen St, Stop 86 Buckley AFB CO 80011-9551

If you have any questions please feel free to contact Ms. Elise Sherva at 303-677-9077, Email elise.sherva@buckley.af.mil or Ms. Janet Wade at 303-677-9977, Email janet.wade@buckley.af.mil.

Sincerely

Base Civil Engineer



FEB 2 8 2003

Lt Col Alfred C. Scharff 660 S Aspen St, Stop 86 Buckley AFB CO 80011-9551

Denise Balkas
Director of Planning
City of Aurora
1470 South Havana
Aurora CO 80012

Dear Ms. Balkas

The Air Force has prepared a Draft Supplemental Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the construction and operation of a H-70 Fuels facility and a Medical Pharmacy. The H-70 facility proposed action is required to provide safe storage, handling, and transportation of H-70 fuel. The medical pharmacy is to provide a centrally located pharmacy for military personnel, their dependents, and military retirees in the Denver metropolitan area. A copy of the Draft EA and FONSI for are enclosed for your review and comment.

Please provide written comments within 30 calendar days of receipt of this letter to:

460 CES/CEV 660 S Aspen St, Stop 86 Buckley AFB CO 80011-9551

If you have any questions please feel free to contact Ms. Elise Sherva at 303-677-9077, Email <u>elise.sherva@buckley.af.mil</u> or Ms. Janet Wade at 303-677-9977, Email janet.wade@buckley.af.mil.

Sincerely

CIPRED E. SCHARFF, MCOI, USAI

B**a∕**se Civil Engineer

Attachment
Draft EA with Draft FONSI (hard copy and electronic copy)



FEB 2 8 2003

Lt Col Alfred C. Scharff 660 S Aspen St, Stop 86 Buckley AFB CO 80011-9551

Ed LaRock
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive, South
Denver CO 80246-1530

Dear Mr. LaRock

The Air Force has prepared a Draft Supplemental Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the construction and operation of a H-70 Fuels facility and a Medical Pharmacy. The H-70 facility proposed action is required to provide safe storage, handling, and transportation of H-70 fuel. The Medical Pharmacy is to provide a centrally located pharmacy for military personnel, their dependents, and military retirees in the Denver metropolitan area. A copy of the Draft EA and FONSI for are enclosed for your review and comment.

Please provide written comments within 30 calendar days of receipt of this letter to:

460 CES/CEV 660 S Aspen St, Stop 86 Buckley AFB CO 80011-9551

If you have any questions please feel free to contact Ms. Elise Sherva at 303-677-9077, Email <u>elise.sherva@buckley.af.mil</u> or Ms. Janet Wade at 303-677-9977, Email janet.wade@buckley.af.mil.

Sincerely

Base Civil Engineer



FEB 2 8 2003

Lt Col Alfred C. Scharff 660 S Aspen St, Stop 86 Buckley AFB CO 80011-9551

Brad Beckman
Manager Environmental Planning
Colorado Department of Transportation
4201 East Arkansas Ave.
Denver CO 80222

Dear Mr. Beckman

The Air Force has prepared a Draft Supplemental Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the construction and operation of a H-70 Fuels facility and a Medical Pharmacy. The H-70 facility proposed action is required to provide safe storage, handling, and transportation of H-70 fuel. The medical pharmacy is to provide a centrally located pharmacy for military personnel, their dependents, and military retirees in the Denver metropolitan area. A copy of the Draft EA and FONSI for are enclosed for your review and comment.

Please provide written comments within 30 calendar days of receipt of this letter to:

460 CES/CEV 660 S Aspen St, Stop 86 Buckley AFB CO 80011-9551

If you have any questions please feel free to contact Ms. Elise Sherva at 303-677-9077, Email <u>elise.sherva@buckley.af.mil</u> or Ms. Janet Wade at 303-677-9977, Email janet.wade@buckley.af.mil.

Sincerely

Base Civil Engineer



FEB 2 8 2003

Lt Col Alfred C. Scharff 660 S Aspen St, Stop 86 Buckley AFB CO 80011-9551

Georgianna Contiguglia State Historic Preservation Officer Colorado History Museum 1300 Broadway Denver CO 80203-2137

Dear Ms. Contiguglia

The Air Force has prepared a Draft Supplemental Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the construction and operation of a H-70 Fuels facility and a Medical Pharmacy. The H-70 facility proposed action is required to provide safe storage, handling, and transportation of H-70 fuel. The medical pharmacy is to provide a centrally located pharmacy for military personnel, their dependents, and military retirees in the Denver metropolitan area. A copy of the Draft EA and FONSI for are enclosed for your review and comment.

In compliance with Section 106 of the National Historic Preservation Act, Buckley Air Force Base has determined that the proposed action, and alternatives, would not have an adverse affect on historic properties (refer to Figure 2-1 of the Draft EA).

- Building 310 (H-70 Storage, 1 in Figure 2-1) was constructed in 1994. The structures around building 310 were also constructed in the 1990's. Therefore, is not eligible for inclusion on the National Register of Historic Places.
- Building 1 (Commissary/BX, 2b in Figure 2-1) was constructed in 2002; therefore, is not eligible for inclusion on the National Register of Historic Places.
- Building 600 (Clinic, 3 in Figure 2-1) was constructed in 1993. Surrounding buildings were constructed after the 1990's. Therefore, building 600 is not eligible for inclusion on the National Register of Historic Places.
- The Proposed Action site for the H-70 fuels facility is located near the flight line and numerous buildings. See 2a in Figure 2-1.

- Building 801, a hangar, was constructed in 1953 and will be evaluated this year per Section 110 of the National Historic Preservation Act. However; if building 801 were considered eligible for inclusion to the National Register of Historic Places, the construction of the H-70 fuels facility would not be considered an adverse affect to historic structures due to the its small size and distance from building 801.
- The remaining buildings were constructed after 1980; therefore, are not eligible for inclusion on the National Register of Historic Places. Building 700 (1993), building 800 (1980), building 810 and 811 (2002), and building 805 (1990).
- An alternative site for the H-70 fuels facility is near the Proposed Ordnance
 District, which has been recorded per your recommendation due to the adverse
 impacts of the munitions construction project. See your letter dated 5 Nov 02.
 The Traffic Control Tower is not part of the proposed district, therefore; its'
 demolition would not be considered an adverse impact.

Please provide written comments and/or concurrence within 30 calendar days of receipt of this letter to

460 CES/CEV 660 S Aspen St, Stop 86 Buckley AFB CO 80011-9551

If you have any questions please feel free to contact Ms. Elise Sherva at 303-677-9077, Email <u>elise.sherva@buckley.af.mil</u> or Ms. Janet Wade at 303-677-9977, Email janet.wade@buckley.af.mil.

Sincerely

Base Civil Engineer

APPENDIX	G:
-----------------	----

AGENCY COMMENT LETTERS AND RESPONSES

APPENDICES	
,	This page intentionally left blank
FINAL Environmental Assessment	
I II WILL ENVIRONMENTAL ASSESSMENT	



02 Apr 03

Alfred C. Scharff, Lt Col, USAF 460th Civil Engineer Squadron 660 S. Aspen Street, Stop 86 Buckley AFB CO 80011-9551

Mr. Ed LaRock, P.G. Colorado Department of Public Health and Environment HMWMD-B2 4300 Cherry Creek Drive South Denver, CO 80246-1530

Dear Mr LaRock

The following comments are in response to your comments in regards to the draft Environmental Assessment (EA) for the Proposed Construction of a H-70 Fuel Storage Facility and a Medical Pharmacy on Buckley AFB CO, dated Feb 2003.

- a. The EA was changed by including, "Soil and groundwater samples would be tested for hydrazine and associated products, including, but not limited to, N-nitrosodimethylamine (NDMA). Coordination of sampling would be conducted with the CDPHE, Hazardous Materials and Waste Management Division, if necessary (page 2-5)."
- b. The EA was changed by removing "potential" groundwater contamination and by removing "considered" closed on page 3-24.
- c. The EA was changed by adding, "or other ACMs" to page 3-27 in discussion of the Fitness Center/Commissary area.
- d. The EA was changed by the addition of the following text, "World War II facilities; however, the soil strata has been disturbed by training or construction activities not associated with pre-ACMs regulations (page 3-27)."
 - e. The EA was changed to reflect the AST instead of UST on page 4-15.
- f. The EA was changed by the addition of the following text, "In addition, if necessary, soil sampling would be conducted to determine the presence/absence of ACMs and other hazardous substances (page 4-15)."

We trust that we have addressed your concerns and your comments will be incorporated into the Final Environmental Assessment, at Appendix G, for consideration by all the decisionmakers. Also, please note that a response letter has been prepared regarding your comments dated 14 Jan 03.

Once all the decision-makers has reviewed this document and prior to signing the Finding of No Significant Impact, this letter will be forwarded to your office.

If you have any questions please contact Elise Sherva at 303-677-9077, or via Email at elise.sherva@buckley.af.mil.

Sincerely

ALFRED C. SCHARFF,

Base Civil Engineer

STATE OF COLORADO

Bill Owens, Governor

Douglas H. Benevento, Acting Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S. Denver, Colorado 80246-1530 Phone (303) 692-2000 TDD Line (303) 691-7700

9 8100 Lowry Blvd. Denver, Colorado 80230-6928

Laboratory and Radiation Services Division

TDD Line (303) 691-7700 (303) 692-3090 Located in Glendale, Colorado

http://www.cdphe.state.co.us

March 13, 2003



Elise Sherva 460 CES/CEVP 660 S Aspen Street, Stop 86 Buckley AFB, CO 80011-9551

RE: "Draft Environmental Assessment (EA) for the Proposed Construction of a H-70 Fuel Storage Facility and a Medical Pharmacy," Buckley Air Force Base, Colorado dated February 2003

Dear Ms. Sherva:

The Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the Division) has reviewed the above referenced document received March 6, 2003. The Division is pleased that this EA addresses some of our concerns regarding asbestos noted in our January 14, 2003 EA review letter to Lt. Col. Alfred Scharff. However, the Division has not received a response to that letter. Additional comments regarding the current EA are attached. These comments require a response from the Air Force before the Division can concur with the EA.

Thank you for the opportunity to comment. Please contact me at 303-692-3324 or ed.larock@state.co.us if there are any questions.

Sincerely

Ed LaRock, P.G.

Environmental Protection Specialist Hazardous Materials and Waste

Management Division

Attachment

cc: Jeff Edson, CDPHE

William Allison, AGO

Tom Bain, APCD, CDPHE

Lt. Col. Alfred Scharff, Buckley Air Force Base

Janet Wade, Buckley Air Force Base

Mark Spangler, Buckley Air Force Base

Judith McCulley, EPA Region 8

File RD003-1.1



ORIGINAL

CDPHE comments on EA for H-70 Fuel Storage Facility and a Medical Pharmacy, Buckley AFB

- 1) This EA discusses the use of hydrazine fuel (H-70) at Buckley AFB. Page 2-5 discusses plans for demolition of Building 310 and observing the soil for signs of hydrazine contamination. Relying on visual observations for soil contamination is not adequate. The soil and groundwater will be sampled and analyzed for hydrazine and associated products (or impurities) including, but not limited to, N-nitrosodimethylamine (NDMA). The Division will need to be involved in review of the sampling and analysis plan and, if detected, the remedial decision process. Adequate PPE should be provided to workers and no oxidizers should be used near this site. In a letter dated March 3, 2003 to Mr. Mark Spangler, the Division requested an expanded preliminary assessment effort at Buckley AFB to determine if other areas on the base need to be included in the Environmental Restoration Program. The potential for hydrazine contamination underscores the need for this effort.
- 2) Section 3.8.1.2, page 3-24 discusses "potential" groundwater contamination at Site 10 and an AST fuel spill that is "considered closed." As noted in Table 3-7, the groundwater at Site 10 is contaminated. Please reference any regulatory "closure" letter for the fuel spill.
- 3) Section 3.8.2.2, page 3-27 limits discussion to asbestos-coated piping. The discussion should be expanded to include asbestos containing material (ACM) mixed with the soil as found at the Fitness Center/ Commissary area.
- 4) Section 3.9.1, page 3-29, sentence one indicates the soils at these sites have been disturbed. However, Section 3.8.2.2, paragraph two, states the project areas have not been disturbed. Please clarify.
- 5) Section 4.8.2.1, page 4-15 refers to a leaking UST. Is this the AST leak described on page 3-24? Please clarify.
- 6) Section 4.8.2.2, page 4-15, requires only surveys of subsurface piping for ACM. Sampling of the soil for ACM and other hazardous substances must be conducted in all project areas. Please see the March 3, 2003 letter to Mr. Mark Spangler.



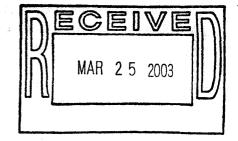
United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services Colorado Field Office 755 Parfet Street, Suite 361 Lakewood, Colorado 80215

IN REPLY REFER TO: ES/CO: Buckley/NLAA Mail Stop 65412

MAR 17 2003



Ms. Elise Sherva 460 CES/CEV 660 South Aspen Street, Stop 86 Buckley AFB, Colorado 80011-9551

Re: Review of Draft Environmental Assessment (EA) for the Proposed Construction of H-70 Fuel Storage Facility and Medical Pharmacy, Buckley Air Force Base,

Colorado

Dear Ms. Sherva:

The U.S. Fish and Wildlife Service (Service) received a February 28, 2003, letter from Alfred C. Scharff, Lt. Col., USAF, regarding the proposed project. These comments have been prepared under the provisions of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 et. seq.), the Fish and Wildlife Coordination Act (48 Stat. as amended; 16 U.S.C. 661 et seq.), and the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4327).

Based on the information provided in the subject Draft EA, the Service concurs that the proposed H-70 Fuel Storage Facility and Medical Pharmacy project is not likely to adversely affect any Federally-listed threatened or endangered species. The Service also is interested in the protection of species that are candidates for official listing as threatened or endangered (Federal Register, Vol. 61, No. 40, February 28, 1996) including the Black-tailed Prairie Dog (*Cynomys ludovicianus*). While this species presently has no legal protection under the ESA, it is within the spirit of this Act to consider project impacts to potentially sensitive candidate species. It is the intention of the Service to protect these species before human-related activities adversely impact their habitat to a degree that they would need to be listed and, therefore, protected under the ESA. We have reviewed the measures proposed in the Draft EA to minimize adverse effects on black-tailed prairie dogs and found them to be adequate. Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

On December 2, 2002, the President signed the 2002 Defense Authorization Bill creating a 1-year interim period during which the prohibitions on incidental take of migratory birds would not apply to military readiness activities. During the interim period, the Secretary of the Interior must develop regulations that exempt the Armed Forces from incidental take during

authorized military readiness and DoD must concur with the regulations before they take effect.

Military readiness includes (a) all training and operations of the Armed Forces that relate to combat, and (b) the adequate and realistic testing of military equipment, vehicles, weapons, and sensors for proper operation and suitability for combat use. It does not include routine operations of installations, operation of industrial activities, or construction or demolition of facilities relating to these routine operations. As such, the MBTA exemption does not apply to incidental take resulting from land management activities, such as controlled burns, or intentional take, such as control of birds at airfields to reduce risks associated with birdstrikes. The legislation also requires DoD, in consultation with the Service, to identify measures to minimize, mitigate, and monitor impacts of their activities on migratory birds.

If the Service can be of further assistance, please contact Sandy Vana-Miller of my staff at (303) 275-2370.

Sincerely

LeRoy W. Carlson

Colorado Field Supervisor

Le Ray Wear Su

cc: S. Vana-Miller



The Colorado History Museum 1300 Broadway Denver, Colorado 80203-2137

21 March 2003

Alfred C. Scharff, Lt. Col., USAF Base Civil Engineer 460th Air Base Wing (AFSPC) 660 S. Aspen St., Stop 66 Buckley AFB, CO 80011-9551

RE:

Dear Lt. Col. Scharff:

Thank you for your recent correspondence dated 6 March 2003, concerning the proposed construction of an H-70 Fuels facility and a Medical Pharmacy at Buckley Air Force Base. Our office has reviewed the submitted materials. We concur with your assessment that the construction of these two buildings will have no effect on nearby historic properties at the base.

If you have any questions, please feel free to contact Joseph Saldibar, Architectural Services Coordinator, at (303) 866-3741. We look forward to hearing from you.

Sincerely,

Georgianna Contiguglia

State Historic Preservation Officer, and President, Colorado Historical Society

MAR 2 7 2003

ORIGINAL

.

